THE CHICAGO COMMUNITY TRUST

AND AFFILIATES

FOOD SYSTEMS REPORT

October 2009

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TABLE OF CONTENTS

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EXECUTIVE SUMMARY

Introduction

The Chicago area has served as a focal point for the production, processing, trading, and consumption of food – as well as home to hundreds of communities with diverse food cultures supporting vibrant food markets and restaurants.

But population growth, climate change, development pressures, global trends, economic realities and concerns about the environment, equity, and food safety will all have an impact on Illinois' ability to continue to meet its own food needs and send farm products to the rest of the world.

The Chicago area should create a "sustainable" food system – one that meets the needs of people today without compromising the ability of future generations to meet their own needs. It should be sustainable economically, environmentally, socially and culturally.

To do this will require, among other things:

- Continuing and improving the existing commodity production and distribution systems while diversifying the overall system to include more local specialty crop and livestock production, including organics;
- Improving equity of access to food, especially fresh produce;
- Improving upon agricultural practices that rebuild the soil, sequester carbon, and protect our region's land and water resources;
- Creating new alliances to enhance protection of land and water and increase the profitability of all kinds of farms;
- Encouraging local institutions to purchase food from local producers and processors and build local economies;
- Reintegrating food production, processing, and distribution as vital aspects of municipal economies;
- Educating everyone from consumers to policymakers, about the issues involved.

The current domestic food system is part of a complex global supply chain. What people in the region eat comes from every continent except Antarctica, with chocolate from the Ivory Coast and apples from New Zealand. Conversely, sometimes raw ingredients raised and harvested near Chicago travel long distances to be processed elsewhere, only to return to Chicago to be eaten in a vastly different form.

As a result, global issues such as climate change, unstable prices and supply of oil, the limited amount of arable land, population growth, pollution, loss of biodiversity and changing markets all affect what the Chicago region consumes and produces.

The shift away from local food production to a global system has taken root slowly over the course of the past century, aided by government policies and technology investment designed to build economies of scale and efficiency in agriculture. Now, fewer farms produce greater amounts of food: while the number of farms declined from 6.8 million in 1935 to 2.10 million in 2005, U.S. farm output in 2006 was 152 percent above its level in 1948.

Illinois is an agricultural powerhouse, ranking sixth in the nation in the total value of agricultural products sold. But interesting, most of what Illinois grows doesn't directly feed humans, partly as a result of federal policies that subsidized high-volume crops like grains but not "specialty" crops like fruits and vegetables. Corn, soybeans and forage crops like alfalfa constitute the bulk of crops grown in the region. Only a tiny amount (0.007 percent) of cropland was harvested for vegetables in 2007. Of the 3,386 farms in the area, only seven percent (or 244 farms) produced food directly for human consumption in 2002.

Countering the long-term trends of consolidation, specialization and mechanization has been the growing interest and investment in alternative methods of both farming and food distribution – from "local food," organic farms and urban agriculture to food cooperatives, community supported agriculture and farmers' markets. Between 2002 and 2007, the number of farms growing produce directly for human consumption grew in all but one county in the region. For the first time in a long time, the number of small farmers increased in 2007, regionally, nationally and statewide, with more diversity of both crops and farmers. And the number of certified-organic farms in the region increased six-fold in recent years, from 7 to 45.

Many reasons propel these counter-trends, from concern about the carbon footprint from shipping food around the globe to worries about pesticides and other chemicals to a desire to feel more connected to the food we eat.

Among other trends that will affect the area's food system going forward:

- High-quality farmlands in and around the Chicago region are considered particularly threatened by suburban development pressures. Already, Cook County lost 80.6 percent of its harvested cropland between 1997 and 2007.
- The region's population will increase by 25 percent and its composition will change by 2040, with the number of whites falling from 57 to 40 percent as the number of Hispanics rises from17 to 29 percent, and the number of school-age residents shrinking while the number of older residents (65-84) doubles. As the population changes, so will patterns of food consumption.
- Americans are consuming more of their calories from restaurants and carry-outs and more processed foods, sugars, fats, and meat, raising health concerns. But they are also consuming more fruits and vegetables and buying more organic products.

- Given the quality of Illinois soil, erosion is a serious issue; an estimated 1.5 bushels of soil are lost for every bushel of corn produced. However, Illinois' leadership in conservation tillage is producing results.
- Access to high-quality, nutritious, and affordable food is not equitable throughout the region. Many communities have no large groceries or supermarkets nearby.
- More than 61 percent of people in the region are overweight or obese, but not necessarily well nourished. Many suffer from diet-related disease likes diabetes and ailments related to an unbalanced diet lacking in fresh produce and whole grains.

Vision

In 2040, we will have a regional food system that nourishes our people and the land. The food system will:

- Achieve economic vitality by balancing profitability with diversification in all sectors;
- Preserve farmland and enhance water, air, and soil quality in closed loop systems;
- Contribute to social justice through equal access to affordable, nutritious food;
- Support vibrant "local food" cultures based on seasonality and availability.

Recommendations

To achieve this vision, Chicago's leaders need to take action between now and 2040 to:

INFRASTRUCTURE

1. Include food and food waste issues in local land use, infrastructure, and comprehensive plans.
2. Make programs and services available to assist diverse local food and food waste businesses.
3. Ensure that locally-, Illinois- and regionally-grown food is bought, marketed, and used by local institutions and businesses and associated food waste is eliminated and sustainably handled.
4. Have regional organizations identify regional food priorities for state and federal funding, using local plans.
5. Encourage regional trade and business organizations to provide programs and services for local food enterprises.
6. Develop, promote and enact state-wide incentives, funding, and regulations to support farmland preservation, sustainable agriculture, marketing and procuring Illinois-grown food, and a variety of food delivery and food waste systems.
7. Promote enactment of national policies that provide incentives, funding, and regulations that support farmland preservation, sustainable agriculture, marketing

and procuring Illinois-grown food, and a variety of food delivery and food waste systems.

FOOD EDUCATION

8. Make "local food" education programs, events, and networks available for general and targeted audiences.
9. Promote healthy eating and fitness with local campaigns.
10. Make the benefits of "local food" evident to local government officials, planners, economists and other policy makers so they can prioritize this system in their respective fields.
11. Include food studies and activities at local academic institutions, at the elementary, secondary and post-secondary levels.
12. Make available local lifelong learning programs and activities on cooking skills, fitness, and nutrition.
13. Ensure that regional entities offer professional programs on regional food issues, collaborate and coordinate with regional entities from nearby states, and promote local and regional food.
14. Promote and enact statewide incentives, funding, and regulations that support local and regional food education priorities and programs that promote "local food."
15. Promote federal incentives, funding, and regulations that support local, regional, and state food education priorities.

FOOD DATA & INDICATORS

16. Collect local information on how and where local produce is sold, distributed, and processed including alternative delivery systems.
17. Collect local information on land currently used for agriculture and land zoned for agricultural zones.
18. Collect local information on sustainable agricultural practices and food waste reduction and processing.
19. Empower regional agencies to develop uniform data collection tools, with input from local governments; to collect, standardize, and analyze local data; and then disseminate data to other local, regional, state, and federal organizations.
20. Enact statewide incentives, funding, and regulations to support collection, analysis and dissemination of state-level information to other local, regional, and state organizations.
21. Promote national incentives, funding, and regulations to support and respond to information collection and analysis issues and share information with other national and international organizations.

Chapter One

ISSUES, CHALLENGES AND OPPORTUNITIES

How will we continue to produce food and feed our population in 2040 while planning for population growth, transportation, homes, and commerce in the region? This is the question that frames this *Food Systems Report* for the Chicago metropolitan region. It builds upon two previously developed Illinois food strategies: one generated at the city level and the other by a statewide task force. It is an opportunity to reinforce food systems policy and planning for the Chicago metro area. It also offers a process for exploring food issues and links with other municipal and county governments throughout the seven-county region.

In 2006, the City of Chicago Plan Commission adopted *Chicago: Eat Local, Live Healthy.*[1] This was the first governmental Chicago-specific food strategy, though nongovernmental organizations and foundations had produced previous studies and papers.[2] *Chicago: Eat Local, Live Healthy* was developed over a two-year period with the participation of city departments, Chicago Public Schools, University of Illinois Extension, U.S. Department of Agriculture (USDA) staff, and organizations, businesses and consultants engaged in urban food growing, selling, and recycling. The intent of the plan was to identify food policies that could improve food quality, lower its cost, and increase its availability to Chicago residents.

In 2007, the Illinois legislature passed the Illinois Food, Farms and Jobs Act, commissioning a 32-member statewide task force to develop a plan to expand and support a local and organic food system and to identify impediments to expanding and supporting such a system. The task force report, *Local Food, Farms & Jobs: Growing the Illinois Economy*, released in March 2009, presents an economic development strategy based on the proposition that Illinois entrepreneurs are not taking full advantage of the state's prodigious natural resources. These resources include:

- Abundant and productive farmland capable of producing a wide diversity of food and other farm products;
- A climate that can produce almost any food that can be grown outside of the tropics;
- A diverse consumer demand;
- A large consumer population;
- A location in the middle of a large populous country, which makes the state a natural transportation hub.

The task force identified the economic opportunity as the differential between the $48 billion that Illinois consumers annually spend on food (2007 USDA figures) and the amount of food that is produced in Illinois.

In order to begin meeting the full potential of Illinois's resources, the statewide task force identified three goals for the year 2020:

- Coordinate state institution and procurement policies to increase the purchase of Illinois local farm and food products at state-funded cafeterias to 20% of local purchases.
- Support and expand programs that recruit, train, and provide technical assistance to 20,000 Illinois residents (5,000 farmers, 12,500 farm laborers, and 2,500 infrastructure entrepreneurs) to produce, process, and distribute Illinois local farm and food products.
- Increase the purchase of Illinois local food products by Illinois consumers to 10% of total food dollar expenditures.[3]

THE REGIONAL FOOD PLANNING PROCESS

As the planners at CMAP and CMAP's stakeholders plot out a prosperous future for the Chicago metropolitan region, it is critical to understand the role of the food system in the built environment, the natural environment, public health, lifestyles, and the economy. The region must start now to prepare to meet its needs in 2040, in light of predicted population growth, demographic shifts, and climate changes.

This report addresses one of many issue areas tackled as part of the *GOTO 2040* plan. The topics of food security and hunger, while related to the topic of food systems, are addressed in a separate report developed by an advisory group of experts led by the Greater Chicago Food Depository and the Northeastern Illinois Food Bank. Chicago lies in a country and region with some of the most fertile and productive farmland in the world, yet thousands in the region go hungry every day. The hunger report makes recommendations largely to address issues of poverty, social justice, and the social service support network.

This Food Systems Report addresses how the food we eat is produced, grown, harvested, processed, packaged, transported, marketed, consumed and disposed. This report identifies and makes recommendations on how to achieve the vision for a regional food system by the year 2040.

This report was developed with input from more than 130 individuals and organizations (see Acknowledgements), who took part in meetings over the course of nine months. Farmers and representatives from private businesses and nonprofit organizations throughout the seven-county region participated. Both urban and rural residents were included. A region-wide advisory committee including input from community-based outreach meetings co-convened by the Chicago Food Policy Advisory Council (CFPAC) and the Chicago Department of Zoning and Land Use Planning (DZLUP) developed the vision and strategies for the regional food system. Four listening sessions were hosted in urban communities and one listening session was conducted with farmers from the region. The Summary of Community Feedback is included in Appendix II.

Additionally, during the research phase, progress was presented to several CMAP region-wide working committees: Environment and Natural Resources, Land Use, and members of the Economic Development committee. A Webinar on the progress of the *Food Systems Report*, attended by many regional partners, was conducted through CMAP during the land-use committee meeting.

In the beginning phases of preparing this report we quickly realized that it is impossible to separate what goes on at the most local level of the food system without acknowledging the national and global food system that we are linked to as consumers and producers. Worldwide, a number of trends are affecting our food system, including what and where food is grown, and at what cost. Global issues include climate change, the unstable price and supply of oil, the challenges of supply and demand based on the limits of arable land, increased population growth, water and air pollution, loss of biodiversity, and changing markets. Regional decisions must be made with full knowledge of the larger context in which they reside.

OUTCOME FOR THIS REPORT

While it would be encouraging to reach the end of the process that resulted in this report and be able to say that there is a broad consensus on obvious regional policies that must be implemented, food systems planning in the Chicago region is not yet at that stage. The more modest outcome for this report is likely to be that planners and policymakers working at different government levels in the seven-county region, and in close collaboration with the private and nonprofit sectors, will be able to determine which avenues may prove most fruitful in impacting the food system to ensure that the growing population of the Chicago region is supported by a food system that is economically, socially, culturally, and environmentally sustainable.

The recommendations, while broad, do point to the strong need for a greater gathering of data and increased public understanding. The outcome of this report may well be that many of the same players who served on the advisory committee will join with new colleagues met during the planning process and decide which questions must be researched first on the path to good decisions and creation of corresponding policies. What elements of the food system make sense to address first? What steps logically follow? Having the research from this report in hand to consider these questions is a critical step.

Planning the Regional Food System

This is an excellent time to engage the public in a broader conversation about what the food system will look like in the future. People are coming to understand that food has an impact on public health, environment, and local economies — all areas of concern for regional planners.

The Chicago region is at a crucial juncture:

- It has the opportunity to reintegrate food production, processing, and distribution as vital aspects of municipal economies — or local planners and policymakers can allow development to accelerate the rate of farmland loss so that agriculture becomes an exclusively rural enterprise.
- Planners and policymakers can improve equity of access to food in the Chicago metropolitan region or they can allow the food retail disinvestment in underserved communities to continue.
- Growers and agricultural businesses can support the kinds of agriculture that rebuild the soil, sequester carbon, and protect the region's waters — or they can practice and promote forms of agricultural production that take more from the environment than they return.
- And every citizen can encourage his or her local institutions to purchase food from local producers and processors to build local economies — or the region can continue to rely on global food supplies with the associated environmental and social costs.

The Chicago region must plan for food now because best planning practices require it.

Traditional planning efforts have not focused on how and where our food is grown and how it arrives at the dinner table. Planning for food systems is a relatively new area of focus for urban planners, appearing for the first time in the American Planning Association's (APA) 2007 *Policy Guide on Community and Regional Planning*.[4] To address food issues in plans, the guide encourages planners to support comprehensive food planning processes at the community and regional levels; develop plans for building local food reserves and related activities to prepare for emergencies; strengthen local and regional economies by promoting community food systems and regional farmland preservation; and support food systems that improve the health of the region's residents and that are ecologically sustainable, socially equitable, and just. These basic APA principles have been taken into account throughout this report.

Food systems planning has begun to take root elsewhere, providing models for the Chicago region. While each region of the country — and the world — has its own set of challenges to address in improving its local food system, the global nature of the food system affects all metropolitan areas similarly. Data gathered from these plans has helped to illuminate the situation for the Chicago metropolitan region. Some influential reports from other regions are summarized in Appendix III.

The Chicago region must plan for food now because the public is engaged and invigorated by the issue as never before.

Food is big news these days. Interest in food issues and conflicts about them are likely to intensify, not subside, in coming years. Many of the issues covered in the *Food Systems Report* have seen recent coverage by the local media. From December 2008 through April

2009, the *Chicago Tribune* ran articles on the following: the health benefits of plant-based diets;[5] the vulnerability of the supply chain for supermarket produce;[6] how the food industry is trying to give consumers easy-to-use nutrition information;[7] how global warming could reduce the nation's corn revenues by $1.4 billion annually[8] and, more dire, the potential of worldwide crop shortages as temperatures rise;[9] issues with eliminating subsidies to farms with sales of more than $500,000 a year (4% of all U.S. farms);[10] an incubator for urban farms and an urban agriculture district;[11] a new grocery store in Chicago, which the alderman calls "a tremendous shot in the arm, a tremendous economic boost" for what she refers to as a former "food desert;"[12] the First Lady's promotion of "healthy food for America," signaled with the April tilling of a vegetable garden on the White House grounds;[13] and seed companies that market to the general public are reporting almost double demand for their products.[14]

The Chicago region must plan for food now because citizens demand it.

This outpouring of interest in the food system has also included a call for action by some local activists. Here is a sampler of what stakeholders have to say, either in the media or in public meetings held for this report:

> *"We must encourage new young farmers"* —Terra Brockman, a farmer and founder of the Land Connection[15]
>
> "*We have seen [that the food system is broken] in higher prices for those who can least afford to pay, in lines at local food pantries, churches and missions, and in the anxious eyes of people who have suddenly become unemployed…the fault really is with all of us who casually, willingly, even happily surrender our rights to safe, wholesome affordable and plentiful food in exchange for over-processed and pre-packaged convenience." — Will Allen, CEO of Growing Power*[16]
>
> *"We need to create thousands of new jobs — in farming, processing, local food system infrastructure and farmer's markets — in rural and urban areas."* — Jim Slama, founder and president of FamilyFarmed.org [17]
>
> *"School food programs must be adequately funded."* — Rochelle Davis, founding executive director of the Healthy Schools Campaign[18]

It's time to plan for food because farmers in the Chicago region need the support of thoughtful public policy.

Farming has never been an easy job, and it's not easy now. These are a few selective quotes from some farmer's voices recorded during the public participation meetings:

> *"We need to improve upon 'right to farm' laws."*
>
> *"We grow corn and soybeans because they are non-perishable, adhere to our climate, we can transport them easily, science and technology improve yield all the time, they give us a competitive advantage, and there is a demand for them around the world."*

"We feed people all over the world; switching acreage from corn and soybeans may be a disservice."

"Can't we come up with some incentives for farmers to keep their land?"

"Where will the next generation of farmers come from?"

WHAT IS A "FOOD SYSTEM"?

The term "food system" is used frequently in discussions about nutrition, food, health, community and economic development, and agriculture. The food system includes all processes involved in keeping a population fed: growing, harvesting, processing, packaging, transporting, marketing, consuming, and disposing of food and food packages. Each step is also dependent on human resources that provide labor, research, and education.[19]

The Chicago region's food comes from every continent except Antarctica. Olive oil from Italy, chocolate from the Ivory Coast, apples from New Zealand, coffee from Columbia: food comes from everywhere. Sometimes raw ingredients raised and harvested near Chicago travel long distances to be processed elsewhere, only to return to Chicago to be eaten in a vastly different form.

UNDERSTANDING THE FOODSHED

The foodshed concept is useful in understanding the geography of the regional food system and its ability to produce food for the region now and for the future. A "foodshed" is the geographic area that is producing food for a given market; the term is adapted from the concept of a "watershed," which refers to the creeks, streams, and rivers that feed into a larger body of water.

Cornell University researchers defined their research on foodsheds as "the *capacity* for the state to provide more of its own food needs based on the quality, quantity, and location of its agricultural land relative to the geographic distribution of the human population."[20] Other studies have used the relative proximity of contiguous political units like counties or a 100-mile radius drawn around a city as a way to define a foodshed. For example, researchers from Cornell and Salisbury universities published an article on efforts to map the potential foodsheds of New York State.[21] They defined their potential foodshed as "the land that could provide some portion of the population center's food needs." Determined to answer the question of whether the state of New York could feed itself based on its agricultural output, a model was developed to map foodsheds throughout the state using soil and land cover data, a measure of food need called the "Human Nutritional Equivalent" that was developed from previous work by the USDA Economic Research Service[22], and by assigning all residents of the state a population center from which they would get their food.

Using this sophisticated modeling, the researchers determined that *New York State could produce only 34 % of its total food needs*. Using the foodshed model, New York City was "largely unfed." Even if New York City were to claim the entire state as its foodshed

(meaning the rest of the state would receive no food grown in-state), only 55% of the city's total food needs would be met. The authors noted several problems with their foodshed model, yet it is an analytic model that attempts to measure what it might mean to make a truly local foodshed a reality.

On the West Coast, the authors of the *San Francisco Foodshed Report*[23] provided data on the supply of food and consumer demand in their defined foodshed. The region produces 20 million tons of food annually. The annual consumption of the San Francisco Bay Area is 5.9 million tons of food. Therefore, the San Francisco foodshed produces 14 million more tons of food than the amount required by the residents of the foodshed.

Unlike New York, San Francisco could conceivably feed itself and still be able to export food. However, it is impossible to know how much of the food consumed in San Francisco was locally grown. The commercial food system in this region, as throughout the United States, does not track the origin of what it sells, primarily because most consumers do not yet demand to know the provenance of what they eat.[24]

The authors of the San Francisco report approached the data collection and analysis phase of their research in three parts with multiple sources for each. These are listed below to provide possible sources for future exploration of similar questions for the Chicago region:

- Agricultural production and marketing data
    - Annual reports compiled by the agricultural commissioners in each county of California, the most reliable sources of information on the production of specific commodities;
    - US Census of Agriculture, which tracks the value of agricultural products sold directly to consumers by county but does not specify the location of the consumer;
- Farmland data
    - Farmland Mapping & Monitoring Program of the Division of Land Resource Protection at the California Department of Conservation, which updates land-use trends on a parcel-by-parcel basis every two years using aerial photography;
- Food consumption data
    - "Consumer Expenditure Survey" from the U.S. Bureau of Labor Statistics, survey of spending patterns published by "Metropolitan Statistical Area;"
    - "Loss-Adjusted Food Availability" data, which is all food produced in the U.S. plus imports, minus exports and taking into account estimates of loss due to spoilage, waste, and other losses. These data are available only on the national level;
    - "Food Commodity Intake Database," which is data for the Western United States region on dietary intake provided by the "Continuing Survey of Food Intake by Individuals and its Supplemental Children's Survey."[25]

At this time, the Chicago region does not yet have similar local data, nor is there any agency currently undertaking such a project on the scale necessary to make it meaningful for policymakers. A foodshed for northeastern Illinois could have Chicago as the hub with concentric rings that reach out to the seven counties in CMAP's area, and then could extend regionally to Illinois and five surrounding states: Iowa, Minnesota, Wisconsin, Michigan, and Indiana. By defining a foodshed area, planners could collect data, target policy, and plan collaboratively with other regional planners. This would produce more integrated regional value chains and would increase the effectiveness of regional food strategies.

UNDERSTANDING "FOOD MILES"

Food miles, or the number of miles food travels to reach our plate, "has become part of the vernacular among food system professionals when describing the farm to consumer pathways of food."[26] The New York foodshed model was based on minimizing the number of food miles. The authors point out that localizing the food supply does not necessarily reduce greenhouse gas emissions, improve energy efficiency or reduce environmental impact. In fact, there are few studies published at any scale that analyze emissions from across the entire food chain, therefore, it is currently impossible to state categorically that simply having a given population eat more local food will produce fewer greenhouse gases.[27]

The British supermarket chain Tesco discovered just how difficult it is to determine the carbon footprint of food. In 2007, it launched an ambitious effort to evaluate and disclose the carbon footprint of each of its 70,000 products. It needed "a universally accepted and commonly understood" means of calculating the carbon cost of food production,[28] but discovered such a universal metric does not exist. While transportation of foods is one generator of greenhouse gases, it is only one on a chain of such processes: production, fertilization, processing, packaging, irrigation, and waste disposal all use energy and contribute their own amounts of greenhouse gases.

"Food miles," like "foodshed," is a term that speaks to human values. Food miles are calculated using food source data and a standard formula (the weighted average source distances, or WASD). A reason for using food miles could be to differentiate local products from products of the conventional system and to further differentiate local products from organic foods from other countries.[29] In doing so, communities have the ability to track local economic benefits and other forms of environmental protection beyond the carbon footprint. For example, purchasers of local foods know that their food dollars are circulating in their communities through farming and distribution businesses, and if those foods are sustainably or organically produced, consumers know that their food dollars are also purchasing forms of local environmental protection.

UNDERSTANDING "FOOD VALUE CHAINS"

Another way to understand food systems is as *value chains*, or webs of relationships among the people who bring food to our tables: farmers, processors, distributors, retailers, and eaters. "Value" in this sense has two meanings. It refers both to the way economic value is carried through the chain and to the ways in which the values of environmental protection,

fair labor treatment, health, and affordability are expressed. As defined by the Value Chain Partnerships in Sustainable Agriculture group at Iowa State University: "In a value chain business arrangement, each actor in the chain must make a mental shift from simply, 'What is best for my firm and my firm now?' to 'What can I do in my firm to maximize the economic, environmental and community benefit to all the members of this value chain?'" [30]

UNDERSTANDING HOW TO PLAN FOR FOOD WITH A GROWING AND CHANGING POPULATION

According to CMAP's draft population estimates for 2040, the region's population is projected to increase by 25%, from 8.1 million to 10.9 million. The Hispanic population is expected to have the highest amount of growth, an increase of more than 120%, bringing the total Hispanic population to 3.1 million in 2040. The overall composition of the population of the region will change with the white population falling from 57% to 40%, and the Hispanic population rising from 17% to 29%. The black population is expected to increase at approximately the same rate as the regional average. The Asian population will have a higher growth rate but absolute numbers are much smaller than the other populations.

Other general predications are that the number of school-age residents will be lower than in 2000 but the number of residents 65-84 is projected to double between 2000 and 2040, from 770,000 to 1.5 million. (CMAP's numbers are based on U.S. Census forecasts scaled down to the Chicago metropolitan area.)[31]

The social, cultural, and community components of our current and projected population are critical to take into account. Yet this is where there is the least amount of locally pertinent research. Traditional foods and food customs are an important dimension of ethnic and cultural identity within mainstream American culture. How much does the current population adhere to any particular way of eating? And why?

Social science researchers note that a growing "awareness of the environmental and social costs associated with the provenance and processes of food production is itself associated with broader changes in modern societies . . . people think of themselves as active, discerning consumers whose choices contribute to their sense of identity. Increasingly, people consume not to fulfill their basic biological needs, but to express a sense of self and improve psychological well-being."[32] Food system planning itself can be a form of citizen participation in which active, educated consumers play a greater role in shaping their food system in alignment with their values.

Our Regional Food System in Context

The current domestic food system reflects the U.S. economy, which participates in a complex global supply chain. The shift away from local food production took root slowly over the course of the past century. Today domestic production reflects eight decades of government policy and technology investment to build economies of scale and efficiency in agriculture. In the 1930s, President Franklin Delano Roosevelt offered the country a "New Deal" that initiated the Agricultural Adjustment Act and developed policy to give incentives

and subsidies to farmers to increase food production. This decreased prices and enabled farmers to increase sales of agricultural products in the global market. Today, many of those subsidies are still in place, as price supports for farmers on certain crops like corn, soybeans, wheat, rice, cotton, barley, oats, sugar, and dairy products.

It is important to note that many of these crops are grown either to feed livestock or are the raw materials for processed foods, and few are produced directly for human consumption. Crops that a customer might find in the produce aisle at the grocery store are not part of the subsidy system and are called "specialty crops." Specialty crops are defined in law as "fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops, including floriculture."[33]

Shortly after the New Deal, the "green revolution" took place, which used advanced technology to turn agriculture into a highly productive industry. The green revolution started in the United States and spread throughout the developing world, introducing fertilizers, pesticides, herbicides, hybrid high-yield crop varieties, and powered farm machinery to traditional farm production systems.[34] At the time of the Great Depression, each American farm produced enough food and fiber to feed 19 people. As of 2008, each American farmer fed 143 people.[35]

Today the USDA governs a great deal of U.S. agriculture through its operating budget of more than $96.5 billion dollars.[36] An overwhelming majority of the USDA budget is for food assistance and nutrition spending. USDA expenditures for food assistance programs in 2008 totaled $60.7 billion.[37] Funding for nutrition programs accounts for 68% of the spending authorized in the 2008 farm bill.[38] Its strategic vision guides much of agriculture in the country and has a major impact on the food system. An excerpt from the 2008 USDA strategic plan summarizes the direction of government involvement in the food system:

> *"The framework of this plan depends on these key activities: expanding markets for agricultural products and support international economic development, further developing alternative markets for agricultural products and activities, providing financing needed to help expand job opportunities and improve housing, utilities and infrastructure in rural America, enhancing food safety by taking steps to reduce the prevalence of food borne hazards from farm to table, improving nutrition and health by providing food assistance and nutrition education and promotion, and managing and protecting America's public and private lands working cooperatively with other levels of government and the private sector."*[39]

While current USDA policy has major implications for the way our food system works, not everyone agrees that it should be the main driver of the food system. Agricultural economist John Ikerd points out rising concerns with USDA policy:

> *"Our current farm policy simply doesn't make sense anymore. There are few people left on farms to be moved into factory and office jobs, even if those kinds of jobs still existed. So little of consumer income is spent for food and so small a portion of food costs are associated with farming, that the efficiency of farming no longer makes much*

difference in public well-being. In addition, the industrial farming methods supported by government programs are now the source of rising public concerns. The industrialization of agriculture – specialization, standardization, and consolidation of agriculture into larger and fewer farming operations – is creating far greater ecological and social costs than can be justified by any possible remaining public benefits."[40]

The consolidation of U.S. agriculture is one significant trend that is evident throughout the country. Today we have fewer farms producing greater amounts of food. The total number of farms in America peaked in 1935 at 6.8 million. This number declined by two-thirds over the next 70 years, even as America's population greatly increased. As of 2005, there were 2.1 million farms in America.[41] The level of U.S. farm output in 2006 was 152% above its level in 1948, growing at an average annual rate of 1.59%. Aggregate input increased a mere one-tenth of one percent annually, so the positive growth in farm sector output was very substantially due to productivity growth. This contrasts with a 3.7% annual output increase in the private nonfarm sector, with productivity growth accounting for a little more than a third of the economic growth.[42]

Despite the overall trend towards the declining number of family farms in the US, in 2007, for the first time in many years, the U.S. Census of Agriculture revealed an increase in the number of small farms. The census showed that the number of farms from 2002 to 2007 actually increased in America while the acreage per farm decreased. The state of Illinois and the CMAP region also follow this trend, as illustrated in Figure 1. The new farms tend to be smaller and more diverse in terms of both what is grown and who grows it. They tend to be operated by younger people, as well as by more minorities and women; many are farmed by people who bring in most of their family incomes from off-farm sources.[43]

Figure 1: Number of Farms and Average Size of Farms in the United States, Illinois, and the Region from 2002-2007

	US 2002	US 2007	Illinois 2002	Illinois 2007	Region 2002	Region 2007
Farms (number)	2,128,982	2,204,792	73,027	76,860	3,358	3,748
Avg. Farm Size (acres)	441	418	374	348	279	226

Source: 2007 Census of Agriculture, Table 8

There are certainly challenges ahead. Intense production demands will be placed on our land in order for U.S. agriculture to meet the demands of population growth and future generations. Concerns include our carrying capacity or production limitations, the environmental impacts of agriculture, food safety issues, our changing diets and consumer demands, and other unknowns such as climate change and natural disaster.

ANOTHER MODEL

In the 1960s and 1970s, a new generation of farmers went "back to the land" to use more traditional, non-chemical-based methods. They embraced the concept of organic agriculture developed by J. I. Rodale of Rodale Press, and built a movement that produced

new retail food cooperatives to sell their products in college towns and big cities. Today, this alternative to commodity agriculture is multi-dimensional and encompasses certified organic or sustainable foods, and local forms of distribution including community supported agriculture, farmers markets, and buying clubs. It has also produced forms of specialty commodity agriculture products that are distributed in national specialty retailers and organic and natural food departments in large grocery chains.

Also in the 1970s, growing food in metro areas reemerged. Large-scale urban food became a national priority beginning with World War I. During World War II, agricultural workers left the fields for better jobs and long-distance produce shipment was a low priority because of an overburdened national transportation system. Victory gardens were a way to "localize food-growing as much as possible" as a way to support the war effort.[44] Then, throughout the 70s, 80s and 90s, growing food in cities was part of efforts to beautify derelict land and supplement food supplies.[45]

By the early part of the 21st century, groups began using the term "urban agriculture" to describe the act of growing food in urban centers, which was often paired with job training,[46] often with a focus on organic products and processes. Urban agriculture is the practice of producing crops and/or raising livestock within urban and peri-urban areas. Some consider it a strategy for community food security, as it weaves together economic, ecologic, social, and cultural systems to reduce and mitigate the externalities of the global food system. Most programs share the impetus to bring people and land together and be an agent for social change.[47]

There are many different ways to grow food in the urban environment. The term "urban," as used in this context, broadly refers to the city, its suburbs, and the urban edge. In the book *City Bountiful: A Century of Community Gardening in America*, Laura Lawson outlines many types of urban gardening, from the individual home backyard to large-scale urban agriculture and workforce-training programs. She illustrates the significance of small-scale programs like children's gardens, neighborhood gardens, entrepreneurial job-training gardens, horticultural therapy gardens, company gardens, demonstration gardens, and more. Most urban gardening happens through small-scale programs that allot land to people with limited access to gardening space, although some programs have extended into rural and low-density areas.[48]

During the listening sessions and community outreach component for this report, the importance of urban agriculture was a repeated theme. From backyard gardening to larger scale business models — urban agriculture is viewed by residents as a viable way to promote economic and community development and self-sufficiency.

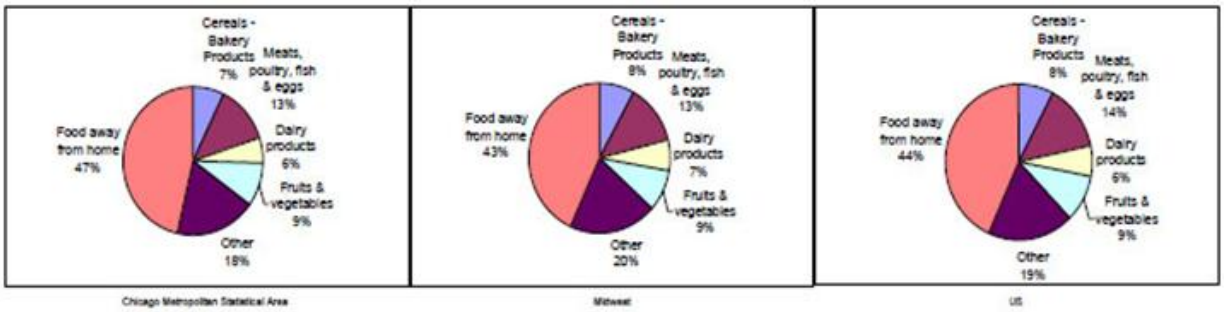
The Obama Administration has responded to these developments by placing greater emphasis on local food systems, rural development, and food access. This is a significant shift from the production agriculture policies of the past, but it does not displace them. As Secretary of Agriculture Tom Vilsack noted to a group of food system funders, "I have two children, and I'm not going to choose between them and say that one is more important than the other."

The USDA has initiated a program, "Know Your Farmer, Know Your Food," described as ". . . a USDA-wide effort to create new economic opportunities by better connecting consumers with local producers. It is also the start of a national conversation about the importance of understanding where your food comes from and how it gets to your plate. Today, there is too much distance between the average American and their farmer and we are marshalling resources from across USDA to help create the link between local production and local consumption."[49] "Know Your Farmer, Know Your Food" includes a suite of services and programs including a farmers market identification link and competitive grant programs to support farm and processing businesses, train beginning farmers, support farmers markets, and improve equity of access to good food. In many cases, this is the result of reorganizing USDA's existing programs and significant resources to make them more accessible. As previously mentioned, an overwhelming majority of the USDA budget is for food assistance and nutrition spending. USDA expenditures for food assistance programs in 2008 totaled $60.7 billion.[50]

HOW WE EAT

Today, Americans are consuming more of their calories from full-service and fast food restaurants, whether eating out or buying take-out food. Calories from food eaten away from home increased from 18% to 32% between the late 1970s and the mid 1990s.[51] According to the U.S. Department of Labor's Bureau of Labor Statistics, expenditures on food away from home, in the Chicago Metropolitan Statistical Area, reached about half of total food expenditures in 2004 and 2005.[52]

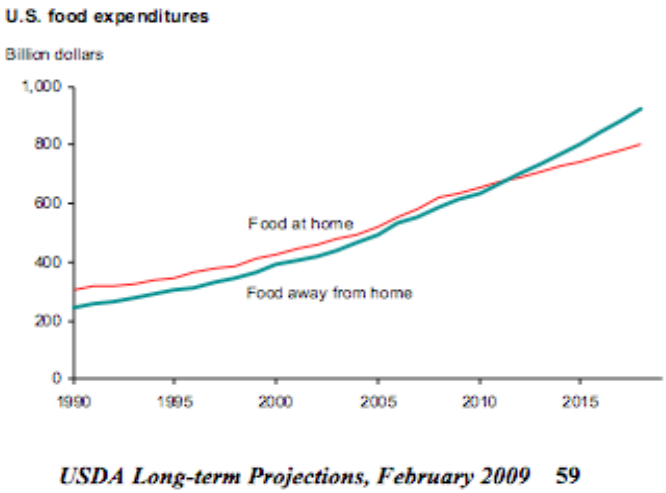
Figure 2: Expenditures on Food – Chicago MSA, Midwest Region & U.S. 2004–2005



Source: United States Department of Labor, Bureau of Labor Statistics. *Consumer Expenditure Survey*. 2004 – 2005.

The USDA projections indicate that dollars spent eating outside the home in both fast food and conventional full-service restaurants will account for more than half of overall food expenditures by 2018.[53] However, the current economic crisis has slowed this trend.[54] Consumers cite convenience and the dining experience with friends and family as more important than nutrition or other factors.[55]

Figure 3: United States Past, Current, and Projected Food Expenditures.



While the typical American diet has shown a steady increase in the percentage of processed foods, sugars, fats, and meat intake, this has been simultaneous with trends toward consuming more fruits and vegetables. [56]

At the same time, there is an increase in the demand for organic products by American consumers. Organic agriculture is one of the fastest growing sectors of U.S. agriculture. Estimated sales of organic food and beverage reached $1 billion in 1990, $10 billion in 2003,[57] and $20 billion in 2007.[58]

The 2008 Farm Bill passed by Congress contained a number of provisions intended to support local and organic food systems:

- Federal procurement policies that allow for "geographic preference" to promote the purchase of local foods;
- Funding for new local and regional supply networks;
- $33 million for the Farmers Market Nutrition Program;
- The Beginning Farmer and Rancher Individual Development Account pilot program offering funds for both technical assistance and capital expenditures (land, equipment, livestock) for new farmers;
- Support for organic agriculture through the Organic Research and Extension Initiative, organic certification cost share programs, and organic data collection.[59]

Still, there are many Americans who do not have their basic food needs met. The report "Household Food Security in the United States"[60] exposed that food insecurity[61] in central cities (14.4%) substantially exceeded the rate for families/households in higher income urban and suburban areas. The same study reported that African-American families/households experienced food insecurity rates of 22%, double the national average.

NEW AND OLD WAYS OF GETTING OUR FOOD

While Americans eat a third of meals out of the home, they still shop at grocery stores and other venues. (The issue of equitable access is a topic explored in more detail later in this report.) Alternatives to the standard grocery store have developed and expanded over the past two decades. Direct marketing of farm products to consumers is increasing. Farmers markets, where farmers bring goods into an urban center at an appointed place and time, are sales outlets for some agricultural producers. Since the USDA Agricultural Marketing Service began to track the nationwide numbers of farmers markets in 1994, the number of markets has grown by over 60%.[62]

Farmers markets allow consumers to have access to locally grown, farm-fresh produce and enable farmers to develop relationships with their customers and cultivate consumer loyalty. Federally funded programs like the Women, Infants and Children (WIC) and Supplemental Nutrition Assistance Program (SNAP), formerly known as Food Stamps, subsidize low-income shoppers' purchases at farmers markets. The CMAP 2040 report on hunger provides more in-depth coverage of federally funded programs.

Another popular form of direct marketing in areas with concentrated populations and close-by farms is the Community Supported Agriculture (CSA) model. In a CSA, an individual purchases a "share" of the farm, meaning that he or she gives the farmer money up front at the beginning of the growing season. In exchange, each week the individual receives a box of vegetables and sometimes other farm products such as eggs, flowers, cheese, or meat. The advantages for the farmers are that they receive payments early in the season, which helps their cash flow and it allows farmers to market the food during the cold months, before the long workdays of planting, weeding, and harvesting begin.

Currently, the government does not track CSAs, so there is no official national count. Local Harvest, a local food networking Web site claims to have the most comprehensive national list in its database; it includes more than 2,500.[63] In the seven-county CMAP region today, there are currently at least 33 active CSA farms.[64]

Other food access models that have emerged in the region over the past ten to fifteen years are Web-based home delivery services like Peapod[65], which is a national service for home grocery delivery. Irv and Shelly's Fresh Picks[66], and Natural Direct[67] are also home delivery services but offer local and organically sourced products. These models operate from a central commissary and do not have the overhead of a retail store. The popularity of these models rely on the user's familiarity with the Web interface, as they offer time savings, the convenience of ordering from home any time of day, online shopping tips, and browsing capabilities that exceed those of in-store shopping. Peapod targets customers in the densely populated urban areas in and around Chicago, Washington, D.C., Baltimore, Boston, and New York City. Target audiences include high-income, two-paycheck households; single parent households; and people with physical disabilities. [68]

THE LEFTOVERS – FOOD WASTE AND PACKAGING

On the other end of the food system, there's a great deal of food that is wasted and ends up disposed of as garbage, rather than being used for nourishment or being composted and returned to the ground as soil. In the U.S., 254 million tons of municipal solid waste was land filled in 2007. Organic matter — meaning material that comes from plants or animals — makes up the largest percentage. Paper and paperboard account for almost 33%, with yard trimmings and food scraps accounting for just over 25%.[69] From foods forgotten and spoiled in the refrigerator to the unfinished food at left on restaurant plates, consumer and food service food waste is the single largest source of food loss in the marketing chain.[70]

Food packaging is another end product of the food system. To-go containers, plastic utensils, plastic bags, and individually wrapped produce are at best discarded and land filled, and at worst end up blowing or floating around as litter. Recent surveys by major international pollsters indicate that the environmental impact of food packing is a concern internationally. Half of all those who were polled were willing to give up convenience packaging, but of U.S. and European respondents only 30% were willing to give up the type of packaging meant to keep food clean.[71] This coincides with another study focused on attitudes towards health and general hygiene,[72] which found that high-profile food scares have heightened consumers' concerns over food safety worldwide. However, cultural differences and situational circumstances influence perceived food risk in spite of actual risk.[73] For example, North Americans are increasingly skeptical of internationally sourced foods and their confidence in the provision of safe food is gradually eroding.[74] Women in general are more concerned about food safety than men, and youth consumers tend to be unconcerned.

All regional food systems are defined by their own specific set of regional geographic circumstances while being linked to the outcomes of history and the regional global economy. In the next section we delve into specific existing conditions of the seven-county region.

Existing Conditions of the Chicago Regional Food System

FARMLAND AND FARM PRODUCTS

Illinois is home to some of the nation's finest soils. It has excellent rail, barge, and interstate transportation systems and its temperate climate includes cold winters that reduce pests, a problem that plagues agriculture in warmer regions. These conditions provide the foundation for Illinois's substantial amount of agriculture including crop, livestock, and food production. In 2006, Illinois ranked second in corn, soybean, and grain production. [75] According to the Agricultural Census, Illinois ranks sixth in the nation based on total value of agricultural products sold, first in the sub-category of grains, oilseeds, dry beans and dry peas and 21st in the subcategory of "vegetables, melons, potatoes and sweet potatoes." For livestock, Illinois ranks fourth in the nation for production of hogs and pigs.[76]

This production is occurring on less land than ten years ago. Illinois lost slightly more than 3% of its farmland, just over 898,000 acres, during the period between 1997 and 2007 (see Figures 4 & 5).[77]

From 1997 to 2007, in all counties within the CMAP Region, the acreages being used for farming have declined.[78] Loss of agricultural land is predominantly the result of conversion of farmland for development of other uses such as residential, commercial or industrial uses.[79] Figure 4 depicts the total acreage of land in farms by county. Much of the farmland in Illinois is considered high quality and, in particular, the high-quality farmlands in and around the Chicago region are considered threatened by suburban development pressures (see Figure 5).[80]

Figure 4: Land in Farms (acres), Change in Acreage and Percent Change
Illinois and CMAP Region 1997, 2002 & 2007

Locale	1997	2002	2007	Change	% Change
Illinois	27,673,285	27,310,833	26,775,100	-898,185	-3.2
Cook	42,174	23,836	8,198	-33,976	-80.6
DuPage	17,654	7,683	7,948	-9,706	-55.0
Kane	215,146	198,227	192,372	-22,774	-10.6
Kendall	169,909	168,082	166,872	-3,037	-1.8
Lake	52,528	38,860	34,525	-18,003	-34.3
McHenry	251,041	233,458	215,584	-35,457	-14.1
Will	300,090	265,490	220,851	-79,239	-26.4

Source: USDA National Agricultural Statistics Service. Census of Agriculture 1997, 2002, 2007

Note that Cook County lost 80.6% (see Figure 4) of its harvested cropland between 1997 and 2007. Will County lost over 79,000 acres of land in farms (more than any other county in the CMAP region by far) during that same period.[81] Figure 6 shows the acres of land in farms as a percentage of total land area in each county.

Farm production in the CMAP region is similar to that of the entire state. Corn is the number one crop for all of the counties in the CMAP region, with the exception of Cook County, which grows slightly more soybeans than corn. Forage—that is, crops like timothy or alfalfa used for hay—was the third most-produced crop in all counties except DuPage and Kendall, which grew more sod than forage.[82]

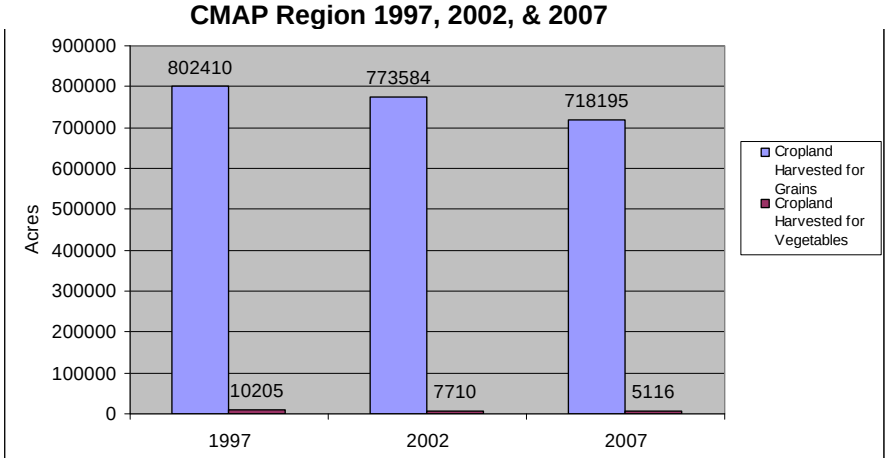
Figure 5: Land in Farms as a Percentage of Total Land Area – Illinois & CMAP Region 1997, 2002 & 2007

Locale	1997	2002	2007
Illinois	77.0	76.8	75.4
Cook	6.9	3.9	1.4
DuPage	8.3	3.6	3.8
Kane	64.6	59.5	57.8
Kendall	82.3	81.9	81.4
Lake	18.3	13.6	12.2
McHenry	65.0	60.4	55.8
Will	56.0	49.6	41.2

Source: USDA National Agricultural Statistic Service. *Census of Agriculture 1997, 2002 & 2007*

Vegetable production in all counties is relatively low, though in Cook County, vegetables harvested ranked fourth in its top crops.[83] An extremely small percentage of the total harvested cropland, within the CMAP region (and state of Illinois), is used for growing vegetables (See Figure 6). In 1997 only 0.011% of total harvested cropland, within the CMAP region, was harvested for vegetables. That number decreased to 0.007 % by 2007.[84]

Figure 6: Cropland Harvested for Vegetables vs. Grains and Soybeans CMAP Region 1997, 2002, & 2007

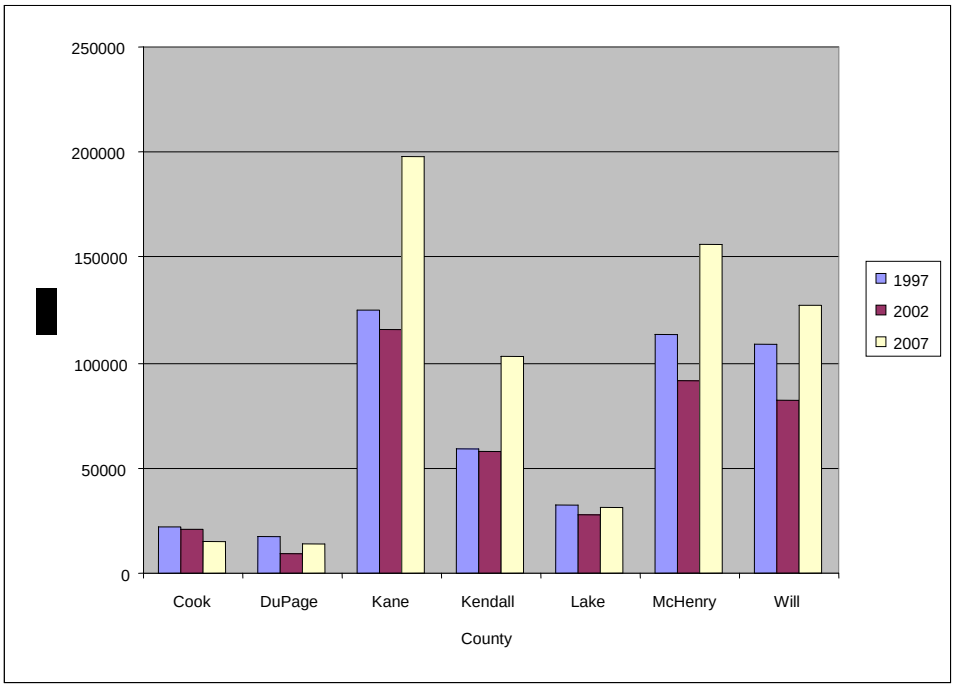


Source: USDA National Agricultural Statistics Service. Census of Agriculture 1997, 2002 & 2007

Figure 7 (below) shows the market value of agricultural products sold within the CMAP region by county between 1997 and 2007. Between 1997 and 2002, every county experienced a decrease in total market value of agricultural products sold. However by 2007, every county except Cook, (the most urbanized) rebounded and realized an increase in total market value of their agricultural products. These figures include the sale of agricultural products, both edible and inedible, as well as products sold directly to

individuals for human consumption and grown certified organic (2002 and 2007 include data on organic farms, while 1997 does not).[85]

Figure 7: Market Value of Agricultural Products CMAP Region 1997, 2002 & 2007, figures displayed in thousands of dollars.

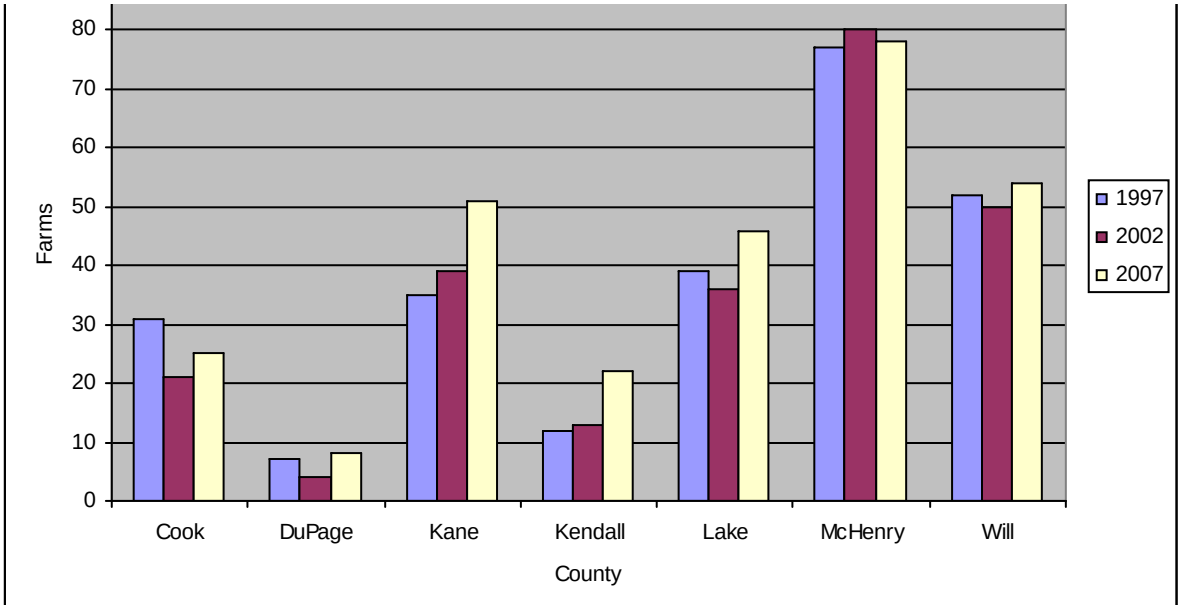


Source: USDA National Agricultural Statistics Service. Census of Agriculture 1997, 2002 & 2007.

There are 3,386 farms in the CMAP region, yet only 243 (see Figure 8), or 7%, produced specialty crops or items that were sold directly for human consumption in 2002. However the number of farms producing food eaten directly by consumers is increasing. From 2002 to 2007 every county but McHenry had an increase in the number of farms producing crops for direct consumption (see Figure 8). McHenry County produces the most products for direct consumption, with about 78% of farms in that category.[86]

It is important to note that existing data does not break down crop type beyond "direct for human consumption" or "specialty crop."

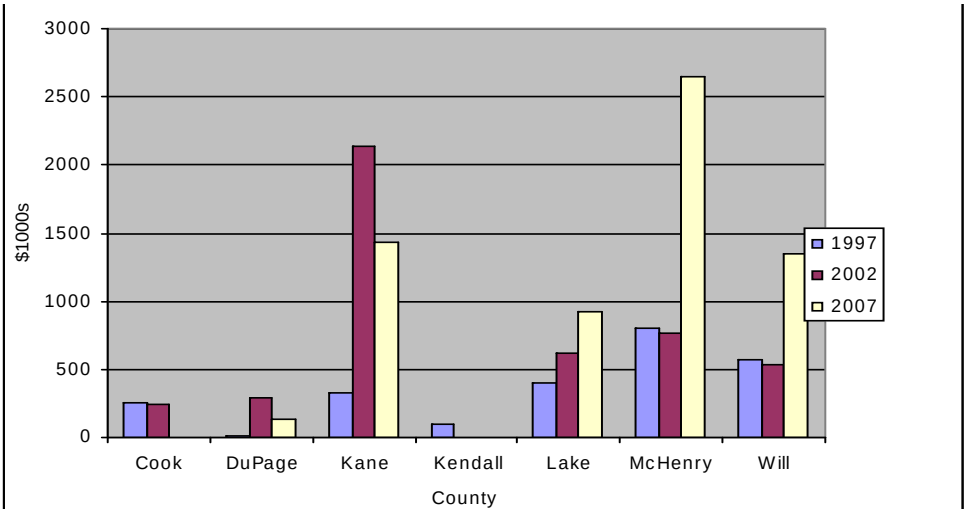
Figure 8: Number of Farms that Grow Products for Direct Human Consumption -- CMAP Region 1997, 2002 & 2007



Source: USDA National Agricultural Statistics Service. Census of Agriculture 1997, 2002 & 2007

The graph in Figure 9 shows the total market value of vegetables that are produced directly for human consumption by county. Three counties—Lake, McHenry and Will—registered an increase in value for direct products between 1997 and 2007 while the other counties showed decline. Kane, while having an increase from 1997 to 2002, did register a decrease from 2002 to 2007. However the value of its direct products in 2007 surpassed those of Lake and DuPage counties combined.

Figure 9: Market Value of Agricultural Products Sold Directly to Individuals For Human Consumption -- CMAP Region 1997, 2002, 2007



Source: USDA National Agricultural Statistics Service. Census of Agriculture 1997, 2002, & 2007

In 2002, only seven farms within the CMAP region produced crops or food items that were grown certified organic.[87] From 2002 to 2007 that number increased over six times to 44 farms. As seen in Figure 10, in 2002, only McHenry and Will had farms that produced items in a certified organic manner. By 2007, all counties except DuPage had organic farms with Cook, Lake, and McHenry counties having the highest numbers. The value of organic products sold increased as well. Although much of this data was not published to avoid disclosing data for individual farms, sales in 2002 were reported as $130,000 and that more than doubled to $356,000 in 2007.[88]

Figure 10: Number of Farms Producing Certified Organic Crops

CMAP Region 2002 & 2007

Locale	2002	2007
Cook	-	12
DuPage	-	-
Kane	-	4
Kendall	-	2
Lake	-	12
McHenry	5	11
Will	2	3
Total	7	44

Source: USDA National Agricultural Statistics Service. Census of Agriculture 2002 & 2007. Note: in 2002 & 2007 organic production figures were self reported and no effort was made to verify organic production with certifying organic agencies. Where "-" appears, no data was reported.

SOIL QUALITY IN THE SEVEN-COUNTY REGION

The CMAP region has some of the highest quality agricultural soils in the world. Erosion is a serious problem here, as it is elsewhere. In 1990, the Illinois Environmental Council reported that water and wind, on average, carry away approximately 130 million tons of soil off of Illinois' arable land every year. At this soil loss rate, it is estimated that 1-½ bushels of soil are lost for every bushel of corn produced.[89] The productive layer of dirt, the "humus" or topsoil is the most vulnerable. It can be eroded by wind or water.

Efforts to combat erosion are producing results. According to the most recent updated statewide National Resources Inventory, farms in the U.S. decreased sheet and rill soil erosion by 43% on cropland from 1982 to 2003.[90] In recent years, Illinois has become a leader in conservation tillage, where crops are grown with no or minimal cultivation of the soil. New crops are planted into the stubble from last year's harvest, which reduces the amount of soil that blows away or is washed away. In the mid 1990's more than 8 million acres or approximately 39% of cropland in Illinois were farmed using conservation tillage or no-till practices.[91] Illinois farmers are using assistance programs to implement sound land management practices to protect the environment including buffer and filter strips intended to reduce runoff, new tree plantings, and grassed waterways.[92]

Soil in the older cities presents different issues. In the city of Chicago there are few areas where the landscape has not been altered which often impacts the quality of soils. A 2005 study by Dr. Wes Jarell from the University of Illinois-Urbana-Champaign[93] indicated that geologic and human forces have manipulated urban soils in the Chicago area over time. In general, urban soils are highly disturbed, with lost topsoil (planting in subsoils) or topsoil imported from somewhere else, heavily compacted, over-fertilized with elevated salinity levels, subject to flooding, have poor aeration, and contain metals and organic pollutants.

Protocols for growing food on vacant land in cities, and specifically in the city of Chicago, have been developed over the last five to ten years by government and nonprofit organizations that assist groups in growing food for home and community use and general sales.[94] [95]

URBAN AGRICULTURE AND GARDENING

As previously mentioned, urban agriculture is an emerging trend in cities. Urban agriculture and urban gardens take on a wide range of forms, often based on where they are located and what kind of land is being used. Gardens may be located on institutional grounds, public land, or private land. Currently there is no zoning for agriculture in the region's urban centers, including the city of Chicago. The Chicago Department of Zoning and Land Use Planning is currently studying the zoning issues associated with large-scale urban agriculture projects.

In the last few years there have been a number of urban agriculture projects of considerable scale in the seven-county region, though there is no aggregate data source that tracks how many urban agriculture programs there are. Several of these programs have emerged to address more than just food production and focus on job training, employment, public health issues associated with poor diets, and food security needs in Chicago.

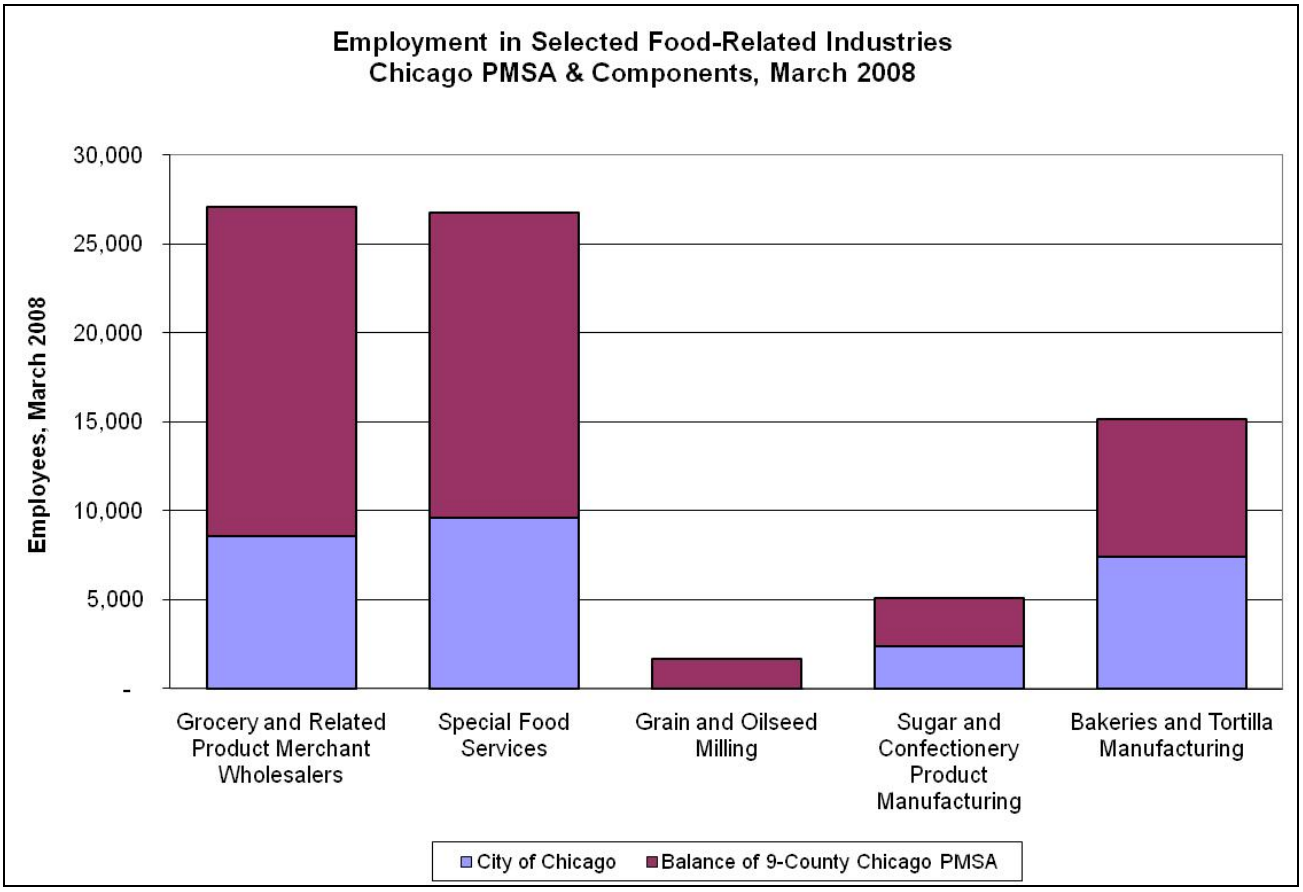
"Green jobs," or "green collar jobs," are emerging as a strategy for workforce development in job training and employment. Urban agriculture is one such strategy. For the past 15 years the City of Chicago Department of Environment has trained the hard-to-employ in horticulture and agriculture and deployed them to assist with community greening projects.

FOOD PROCESSING

Food processing has been an economic engine in the seven-county region since the 1840s. By the time of the Civil War, Chicago led the nation in meatpacking[96] and continued its dominance for decades after. The food processing industry remains strong not only in Chicago but across the region. In fact, in 2004, UCLA conducted a study to determine how Los Angeles could improve its food processing sector and used Chicago as a comparison because "it has the largest food processing cluster in the nation and is a significant food processing employer."[97]

In 2008, World Business Chicago pulled data on a number of regional industries for the City of Chicago Department of Planning and Development to get an indication of the manufacturing sectors that are prominent in the Chicago region.[98] More recent figures from the Illinois Department of Employment Security (IDES) regarding the numbers of individuals employed in several food- related industries in the city and the region are shown in Figure 11. According to IDES data for the nine-county Chicago PMSA, more than 100,000 people were employed in the food manufacturing, special food services, and grocery and related product merchant wholesalers industries in March of 2008.[99]

Figure 11: Employment in Selected Food-Related Industries, Chicago PMSA & Components.



Source: Illinois Department of Employment Security (IDES), March 2008

FOOD DISTRIBUTION

Historically, Chicago has been a transportation and food hub of the United States. The Calumet Area on Chicago's southeast side is North America's largest center for intermodal freight shipping.[100] Trucks move $572 billion worth of goods to, from, or within our region annually and the value of goods transported by rail is $350 billion. Proximity to a well-developed transportation network and prime farmland keeps the CMAP region competitive

with other parts of the U.S. and the world for the transportation and processing of food items.

However, when planning for the future of the region's transportation system, it must be acknowledged that a lack of coordination and inadequate infrastructure means that freight coming through the region often travels very slowly and contributes to traffic congestion. Compounding the problem is an inefficient network of suburban truck routes that makes transporting food by truck costly and time-consuming.[101]

ACCESS TO HEALTHY AND FRESH FOODS

Access to high-quality, nutritious, and affordable food is not equitable throughout the CMAP region. The conclusion of a 2007 study of regional Chicago area communities was that 22 of 77 communities had no large groceries or supermarkets. Of these 22 underserved communities, five were predominantly African-American. Five others were mixed-race communities on the city's South Side. In one particularly isolated African-American community on the far South Side, Riverdale residents had to travel over three and a half miles to access the nearest large supermarket. [102]

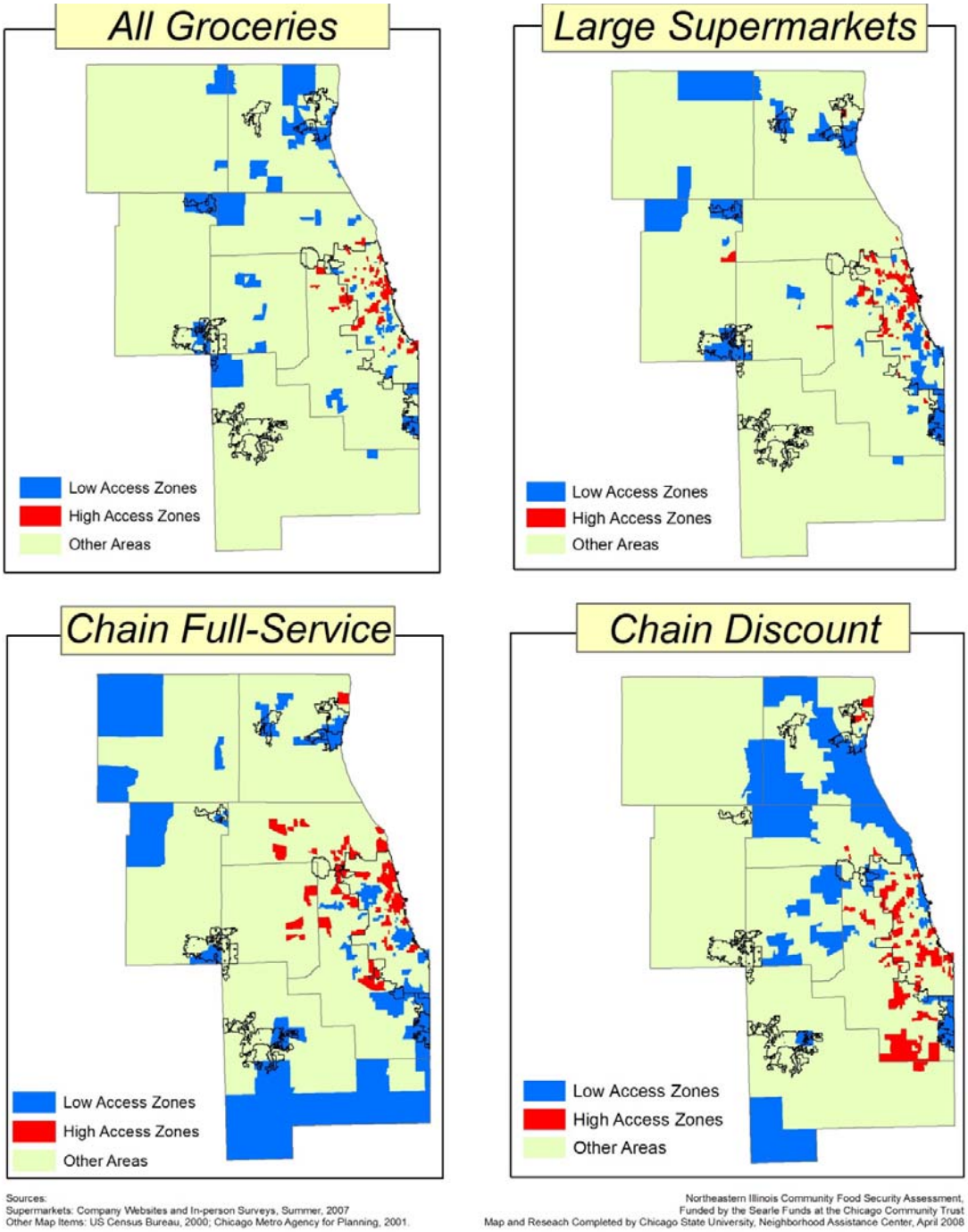
The problem of inequitable access is not unique to Chicago. Suburbs with a preponderance of low-income and minority residents often have poor access to large stores, particularly in predominantly African-American suburbs. Maywood, North Chicago, and Robbins, for three examples, had no large supermarkets at the time of the study. Public transportation is often more limited in suburban areas causing further complications for residents interested in accessing healthy food.[103]

Store type differences can have large effects on fresh produce availability and quality. For instance, a 2003 study of the Austin community on Chicago's West Side and neighboring Oak Park found that there were 95 total groceries in Austin, but of these, 50 were corner stores and 19 were liquor stores carrying a small, limited selection of food. There were only 39 total stores in Oak Park—a more affluent suburb, which has about half the population of Austin—but only four of these were characterized as corner stores, and none were described as "liquor stores with food." Of the 69 corner stores and liquor stores with food in Austin, only 32 had any produce. Of these, 17 carried only one poor quality produce item.[104]

Alternatives to traditional grocery stores are emerging as new business models throughout the seven-county region. Online shopping and delivery companies deliver groceries throughout the seven-county region, although delivery does not include every community or municipality. Local food programs have built a presence as an alternative to grocery outlets. Farmers markets are an alternative source of produce for some, and while numbers are growing on the South Side of Chicago, they are still concentrated in the densest areas of Chicago's north lakefront and in upper-income suburban areas.[105] Most are open only one day a week for limited hours, and are not year-round. Community supported agriculture programs (CSAs)[106] are somewhat more flexible, and particular groups such as Growing Power are bringing CSA packages to poorer areas through their Market Basket Program.

However, most pick-up sites for CSA subscriptions are still concentrated in higher income regions of the city and suburbs.[107]

Figure 12: High and Low Food Access Zones – CMAP Region 2007



Source: Finding Food in Chicago and the Suburbs, The Report to the Northeastern Illinois Food Security Assessment, Report to the Public – June 3, 2008. Note: Kendall County not included in Figure 12 maps.

PUBLIC HEALTH

Over 61% of people in and around Chicago are overweight or obese,[108] but that doesn't necessarily mean that they are well nourished. Many suffer from diet-related diseases like diabetes and ailments related to an unbalanced diet lacking in fresh produce and whole grains. Figure 13 illustrates the findings from a Center for Disease Control report on the region's increased incidences of physical conditions associated with poor diets.

Food researchers have found that a major factor behind obesity is an increase in individual caloric intake that is related to a decrease in the cost of processed foods due to technological advances in the production and transportation of food.[109] This trend has had dramatic impacts especially on the low-income population.

The rise of diet related disease is of major concern to the nation. Two-thirds of premature deaths in the U.S. are due to poor nutrition, physical inactivity, and tobacco use. Federal and state governments conduct effective programs to reduce tobacco use, but programs to promote healthy eating and physical activity and reduce obesity are limited.[110]

Public health is another emerging field in planning. The UIC School of Public Health is preparing a report on public health in the CMAP region for publication.

Figure 13: Percentage of Individuals Diagnosed with Diabetes or as Obese or Overweight – Chicago-Naperville-Joliet, IL-IN-WI Metropolitan Statistical Area 2002 to 2007

Condition	2002	2003	2004	2005	2006	2007
Diabetes	6.2	7.2	5.5	7.5	7.6	8.7
Obesity *	21.9	22.6	22.0	24.6	24.2	24.9
Overweight **	37.6	38.0	36.7	34.2	36.8	37.0

* Obese is defined as having a Body Mass Index (BMI) of > 30

** Overweight is defined as having a BMI of between > 25 or < 30

Source: Centers for Disease Control. National Center for Chronic Disease Prevention and Health Promotion – Behavioral Risk Factor Surveillance System. Selected Metropolitan/Metropolitan Area Risk Trends. Compare Health Risk Data for the Chicago-Naperville-Joliet, IL-IN-WI Metropolitan Statistical Area – 2002, 2003, 2004, 2005, 2006, 2007

Challenges and Opportunities in the Regional Food System

This report provided an opportunity for regional stakeholders to collectively envision a future for the regional food system. Thus begins the process of integrating food systems into long range planning for the seven-county region. It is impossible to anticipate all the challenges ahead, but some key ones below summarize our research.

CHALLENGES

- *Competition for resources.* Natural resources like land, air, and water are threatened by long-term growth in the region. Other resources like human capital and funding are also important to the food system. Over time, these resources will likely be threatened by global climate change, population growth, access to energy, commodity prices, and the overall economy. This will determine what is grown in the region and at what cost.
- *Global system.* Many decisions and trends that directly impact the regional food system do not come from the region, but from outside of it. As a region our food system is part of a complex global web that will probably never go away. To what extent does that threaten the region's food security? Its use of resources? And its connection to labor and economic issues?
- *Lost soil.* When farmland is lost to residential, commercial and industrial uses, one of the region's most precious natural resources — the soil — is lost as well. Given the high quality of Illinois soils and potential productivity of the land, it is of global concern when such arable land is lost to other uses. In 1990 it was estimated that water and wind were carrying away nearly 130 million tons of soil off of Illinois' arable land every year. One and a half bushels of soil were lost for every bushel of corn produced. About the same time efforts to combat erosion began producing results. Illinois farms decreased sheet and rill soil erosion by 43% on cropland from 1982 to 2003. In recent years, Illinois has become a leader in conservation tillage, where crops are grown with no or minimal cultivation of the soil.
- *Lost farmland.* All counties in the CMAP region lost farmland from 1997 to 2007. The amount of farmland lost ranged from 2% in Kendall County to 81% in Cook County.
- *Diversity of food production.* There is a lack of food production for direct human consumption in the region. Corn is the number one crop for all counties with the exception of Cook, which grows slightly more soybeans than corn. Vegetable production in all counties is relatively low, though in Cook County, vegetables ranked fourth in top crops (see pages 31-38). Of the 3,386 farms in the CMAP region only 7% of those (244) produce items that were sold directly for human consumption in 2002 (see page 31-38). However, from 2002 to 2007 every county but McHenry had an increase in the number of farms producing crops for direct consumption. McHenry County produces the most products for direct consumption with about 78% of farms in that category.
- *Consumer trends.* Many factors come into play when farmers decide what to grow. The market is the largest driver. There are conflicting trends of both more consumer demand for local fruits and vegetables and at the same time there is an increase in eating out and buying take-out food as well as a rise in the obesity rate, which is at 61% in the metro area. In outreach, both Chicago community members and Cook County farmers acknowledge the need to increase awareness and education of the value of local produce, nutrition, and gardening and cooking skills to increase healthy eating habits and demand for local produce (see Appendix II.).

- *Uneven access.* Access to food, whether grown locally or elsewhere, varies dramatically throughout the CMAP region. Of 22 areas in Chicago that had no large groceries or supermarkets in 2007 five were predominantly African-American and five others were mixed-race communities on the city's South Side. In one particularly isolated African-American community on the far South Side, residents had to travel over three and a half miles to access the nearest large supermarket. Suburbs with a preponderance of low-income and minority residents often have poor access to large stores, particularly in predominantly African-American suburbs. Maywood, North Chicago, and Robbins, for three examples, had no large supermarkets at the time of the study. Public transportation is often more limited in suburban areas causing further complications for residents interested in accessing healthy food. In the absence of larger grocers, corner stores and liquor stores carry food but with small, limited selections. Access to healthy food at affordable prices was one of three top concerns raised at community outreach meetings during this planning process. Besides stores, growing food in neighborhoods, in backyards, and at a larger scale was seen as a way to get healthy food into communities (see Appendix II).
- *Scarce data*: Sources of data need to be identified and collected to measure progress of the regional food system over time. Currently there is not enough detailed information at this level to help measure the food system over time. This is covered in more depth in the recommendations.

OPPORTUNITIES

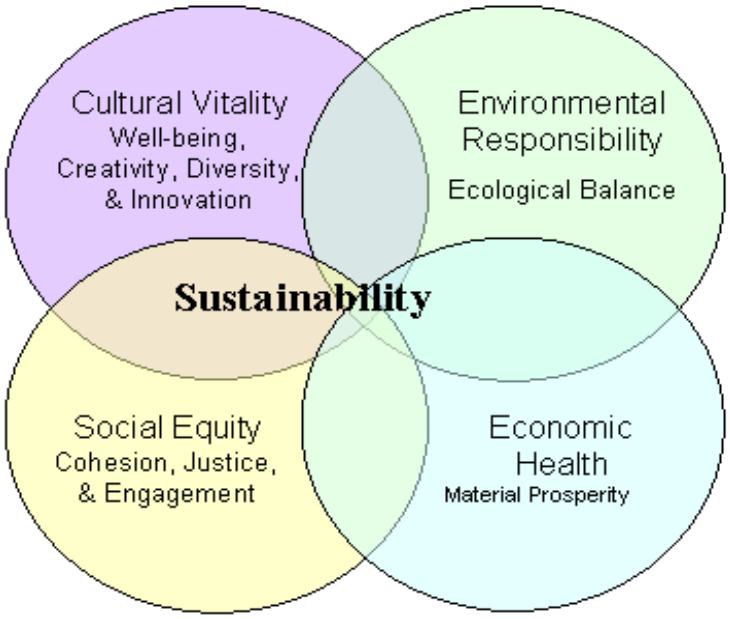
- *More Farmers*. For the first time in a long time, there has been an increase in small farmers, nationally, statewide, and regionally. Evidence suggests increased diversity in what is grown and who is growing it.
- *Community engagement.* "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has." As this Margaret Mead saying affirms, it is inspiring to remember that a great deal of change can come from the bottom up by building community-level awareness of food systems.
- *Policy.* Nationally, the Obama Administration has greatly increased the emphasis on local food systems through USDA programs including "Know Your Farmer, Know Your Food," Beginning Farmer and Rancher competitive grants, and others. At the local level, Food Policy Councils, such as the Chicago Food Policy Advisory Council, engage government and citizens at the state, county and municipal levels to develop policies to address the food system.
- *Education.* Across all levels, education is playing a major role in advancing thought about the role we play in the food system, from the individual to the government. This can work both top down and bottom up.
- *Planning.* Land use, economic development, and redevelopment policies can offer a valuable set of tools to promote and enhance the regional food system. Local

governments, private developers, and community groups can all work to create patterns of development that will support a regional food system — by ensuring for example, that regional farmland, and neighborhood grocery stores are supported, or by creating demand and market outlets for local foods.

- *Freight hub.* Food is a good with a consistent demand. It is used on a daily basis and is the largest category of freight shipped using our highway system. As the center of the country, the seven-county region has the potential to both utilize existing transportation infrastructure and develop new systems to better serve the local and global food system. Such development can be explored as a vehicle for regional economic development.
- *Regional Identity.* Chicago has a strong tradition as a "food region". It is an agricultural, processing, and trading Mecca, home to hundreds of communities with diverse food cultures supporting vibrant food markets and restaurants.

Chapter Two

A NEW VISION FOR FOOD SYSTEMS



The following vision statement was developed, and is consistent with the *GO TO 2040* regional vision for metropolitan Chicago.

> *In 2040, we will have a regional food system that nourishes our people and the land. The food system will:*
>
> - *Achieve economic vitality by balancing profitability with diversification in all sectors;*
> - *Preserve farmland and enhance water, air, and soil quality in closed loop systems;*
> - *Contribute to social justice through equal access to affordable, nutritious food; Support vibrant "local food" cultures based on seasonality and availability.*

This vision centers on sustainability, which can be defined as a system that *"meets the needs of the present without compromising the ability of future generations to meet their own needs."* [111] The most widely accepted model of sustainability uses the analogy of a three-legged stool with *economic, environmental*, and *social* components or "pillars." But an emerging model of sustainability, "The 4th Pillar Model,"[112] seeks to add a fourth pillar, *culture*, to the mix. A complete understanding of the food system greatly benefits from this four-pillar model as food attitudes, cultural identity, food consumption patterns, and general expectations regarding access, availability and affordability are culturally driven.

Here *culture* encompasses widespread everyday choices that we make and the ways we honor traditions.

This framework is consistent with ongoing work in the region. CMAP uses a working definition of sustainability for the application of land use and transportation planning that encompasses four major principles:

- Protect the environment;
- Improve the economic performance and quality of life for individuals;
- Preserve the value of human and manmade capital for future generations;
- Ensure a fair distribution of life-equity.[113]

This vision leads to the advisory committee's key goals and objectives for the 2040 food system:

- *Diverse systems are encouraged.*

  The current prevailing system of food production and distribution continues to be improved, while the emerging system of local and organic food production is greatly expanded. Existing infrastructure for growing and distribution are retooled to increase the number and diversity of food producing enterprises and the choices for consumers. Potential synergies between the two systems are examined and opportunities acted upon.

- *Education for consumers about the food system is greatly increased*.

  The current sense of mystery and lack of knowledge about where the food we eat comes from — who raises it, processes it, and makes policy decisions about it and why — is a formidable barrier to creating a more sustainable system. Educational efforts must be intensified at all levels of the food system from policymakers to consumers. In CMAP's seven-county region, education begins at the consumer level through school and community gardens, farmers markets, and agricultural endeavors close to where consumers live. While such ventures provide — and probably will continue to provide — a relatively limited proportion of the food that's consumed in the region, they reconnect individuals to how food is grown and produced, and they prepare the region's consumers to become active participants in decisions about the food system.

- *The "foodshed" is clearly defined, with significant stakeholders largely in agreement*.

  Clarifying what is meant by the "foodshed" (geographic area that is producing food for a given market) for the Chicago metropolitan region will enable local stakeholders to collect data, identify challenges and opportunities and plan collaboratively with other regional, national, and global planners and stakeholders. Defining the foodshed is an initial step on the road to developing a sophisticated

measure of how much food is grown in the Chicago region, how much is consumed locally, and how much is exported. Currently, such measurements do not exist.

- *Alliances are in place among diverse food system constituencies including commodity and direct marketing farmers, as well as the smart-growth planning community*.

  Such alliances can lead to the development of a policy framework that enhances protection of land and water and increases the profitability of all types of farms. Since no clear boundary can be drawn between our regional food system and the larger global system, concerned individuals and organizations at all levels—local, state, national and global—will have to work together on issues where common ground can be found.

Chapter Three

RECOMMENDATIONS

To achieve this vision, the Chicago region's leaders need to take action between now and 2040 in concert not only with the State of Illinois, but with regional planning districts in surrounding states, especially northwest Indiana, southwest Michigan, and southeast Wisconsin. In the following key areas policymakers must:

Food Infrastructure

1. Include food and food waste issues in local land use, infrastructure, and comprehensive plans.
2. Make programs and services available to assist diverse local food and food waste businesses.
3. Ensure that locally-, Illinois- and regionally-grown food is bought, marketed, and used by local institutions and businesses and associated food waste is eliminated and sustainably handled.
4. Have regional organizations identify regional food priorities for state and federal funding, using local plans.
5. Encourage regional trade and business organizations to provide programs and services for local food enterprises.
6. Develop, promote and enact state-wide incentives, funding, and regulations to support farmland preservation, sustainable agriculture, marketing and procuring Illinois-grown food, and a variety of food delivery and food waste systems.
7. Promote enactment of national policies that provide incentives, funding, and regulations that support farmland preservation, sustainable agriculture, marketing and procuring Illinois-grown food, and a variety of food delivery and food waste systems.

Food Education

8. Make "local food" education programs, events, and networks available for general and targeted audiences.
9. Promote healthy eating and fitness with local campaigns.
10. Make the benefits of "local food" evident to local government officials, planners, economists and other policy makers so they can prioritize this system in their respective fields.

11. Include food studies and activities at local academic institutions, at the elementary, secondary and post-secondary levels.
12. Make available local lifelong learning programs and activities on cooking skills, fitness, and nutrition.
13. Ensure that regional entities offer professional programs on regional food issues, collaborate and coordinate with regional entities from nearby states, and promote local and regional food.
14. Promote and enact statewide incentives, funding, and regulations that support local and regional food education priorities and programs that promote "local food."
15. Promote federal incentives, funding, and regulations that support local, regional, and state food education priorities.

Food Data and Indicators

16. Collect local information on how and where local produce is sold, distributed, and processed including alternative delivery systems.
17. Collect local information on land currently used for agriculture and land zoned for agricultural zones.
18. Collect local information on sustainable agricultural practices and food waste reduction and processing.
19. Empower regional agencies to develop uniform data collection tools, with input from local governments; to collect, standardize, and analyze local data; and then disseminate data to other local, regional, state, and federal organizations.
20. Enact statewide incentives, funding, and regulations to support collection, analysis and dissemination of state-level information to other local, regional, and state organizations.
21. Promote national incentives, funding, and regulations to support and respond to information collection and analysis issues and share information with other national and international organizations.

OBJECTIVES, ACTION PLANS AND STRATEGIES

Across the country cities and regions are proposing policies and programs with the goal of responding to and promoting activities related to the food we eat, the places where we can and should grow food, and how we get our food. We developed our recommendations based on research from various pre-existing policies and over the course of several discussions with the advisory committee.

The process of identifying recommendations was difficult to organize due to the complex nature of the food system. It turned out that the data and research needed to produce

comprehensive and detailed list of recommendations related to the seven-county region was not immediately available. In the end, time ran out.

If there is one final recommendation, it is for the continuation of this effort to develop the necessary data and research to do a Phase II or more thorough investigation of recommendations, strategies, and players in the seven-county region. Ultimately we approached recommendations in three main categories:

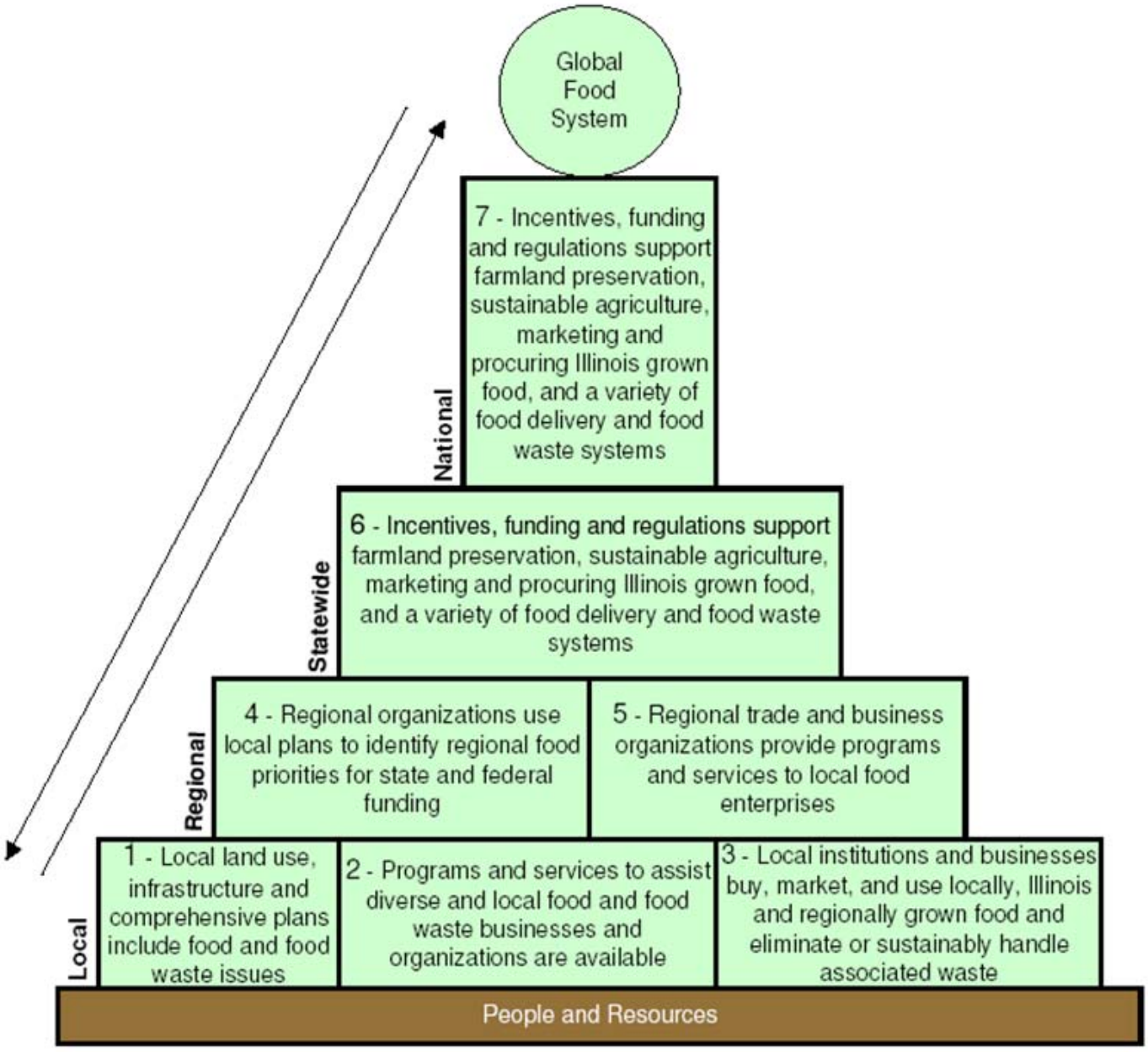
- *Food Infrastructure*. Recommendations for altering the infrastructure of the food system will encourage local physical and land use planning for local food business support; planning for businesses that process food waste; marketing local food with regional coordination of funding priorities and services supported by state and federal funding; and evaluation of various incentives and programs, and implementation of those that hold promise.
- *Food Education*. Recommendations for improving the public's knowledge of the food system call for programs promoting local food, healthy eating and fitness; special events and campaigns; networks and courses for general and targeted audiences with regional collaboration and coordination with nearby states supported by state and federal funding; and implementation of promising incentives and programs.
- *Food Data & Indicators*. Data are needed on local produce and alternative delivery systems; what land is currently used and zoned for agriculture, and what could be; how much food is grown now in the region and how much is consumed; and many other aspects of the food system. Progress between now and 2040 can only be measured with baseline data in place.

Implementation is approached through a pyramid structure for all three categories. All categories start with the base of the region's resources and people -- in other words, the grassroots. The first levels of recommendation blocks on the pyramid are aimed for action at the local level – in cities, villages, and rural parts of townships and counties. The next three levels of recommendation blocks are aimed at regional, statewide and national actions that support work at the local level. All areas from bottom-up to top-down are critical for achieving the vision of this report.

A NOTE ABOUT INDICATORS

Indicators will play an important role in tracking the food system over time and demonstrating its effectiveness. As this is a new area, there are not many indicators that are well developed to support this purpose, especially at the regional level. Some federal data is useful, but many of these indicators do not currently exist, such as data on where local produce is sold or the data on the affordability index of local foods. Our recommendations suggest that this area needs significant activity in order to build tools needed to assess the regional food system in the 2040 plan. Indicator recommendations are part of the data recommendations.

Food Infrastructure Recommendations



RECOMMENDATION ONE: LAND USE PLANS

Recommendation: Include food and food waste issues in local land use, infrastructure, and comprehensive plans.

Governmental agencies with jurisdiction over local zoning and land use restrictions should work with local stakeholders (i.e. farmers, agriculturists, residents, business owners) to identify lands to be preserved for farms and urban agriculture districts, industrial areas

and facilities for food processing, and locations for grocery stores in underserved neighborhoods. This is a first step in prioritizing public and private funds for food infrastructure throughout the value chain. Ideas informing this recommendation break out into four distinct categories.

- The first comprises possible strategies for preserving existing farmland by creating and implementing a range of local governmental incentives and programs including improving and building upon existing right to farm laws, incorporating farmland into proposed subdivisions, and conservation easement programs to protect farmlands and other conservation lands.
- The second set of ideas address possible production uses of available land, in particular the repurposing of underutilized urban lands for agriculture. Local governments are urged to adopt policies that explicitly support and provide incentives for the production of food in the city and the distribution of healthy produce and value-added products. Specific strategies include:
    - Promoting local agriculture in neighborhoods by increasing the amount of land allotted for community gardens and farmers markets;
    - Encouraging the planting of vegetable gardens and fruit orchards on public school grounds while also maintaining adequate space for exercise;
    - Removing regulatory obstacles to planting backyard fruit and vegetable gardens.
- The third group looks at ways to capitalize on existing food production, processing, packaging, storage, and distribution facilities. These suggestions are quite numerous, but include:
    - Utilizing existing food processing facilities for organic processing (possibly by setting aside certain times for organic processing);
    - Establishing Chicago as a hub of local food processing, packaging, and distribution;
    - Developing infrastructure supporting that hub
    - Facilitating the transport of foods from farms to cities;
    - Increasing community access to fresh food by providing incentives and pilot programs that support a diverse array of retail options, from grocers to street markets.
- The final cluster focuses on food waste, with a high priority placed on increasing access to composting at the municipal level. Commercial ventures, neighborhoods, and individual households could all benefit from a compost-centered waste management infrastructure, and local farmers could reap the rewards. Waste reduction strategies could also be explored and waste disposal sites maintained so as to minimize their negative impacts on the community.

RECOMMENDATION TWO: PROGRAMS AND SERVICES

Recommendation: Make programs and services available to assist diverse local food and food waste businesses.

Municipalities and local governments have many instruments – among them tax incentives, tax increment financing, and site assistance — they can utilize to help local businesses get started and thrive.

Funding and credit programs are critical to developing a robust infrastructure:

- Channel grant monies into research that will help develop holistic, energy-efficient transportation and distribution networks as well as into projects that increase local food purchasing, and community and school gardens.
- Create enterprise zones to attract groceries, small-scale food processors, and other businesses to underserved communities.
- Encourage financial institutions to think creatively and extend credit and expertise to new farmers, to businesses engaged in sustainable food production, and all those trying to transition to sustainable practices.

RECOMMENDATION THREE: LOCAL INSTITUTIONAL PRACTICES

Recommendation: Ensure that locally-, Illinois- and regionally-grown food is bought, marketed, and used by local institutions and businesses and associated food waste is eliminated and sustainably handled.

Growers will produce more seasonal food crops if there is a proven market for them. Therefore, local buyers could recognize that locally grown produce travels less distance and stays fresher, and that the purchases of local produce re-circulates money into the local economy. Steady, incremental purchase of locally grown food could keep pace with consumer demand, thus spurring supply and the consequent increased confidence required to develop and expand the local food system infrastructure. Local food needs to be defined specifically in each case.

Strategies for stimulating this cycle of supply and demand center on facilitating relationships between producer and consumer on a large scale. Local government and advocacy groups can work together to facilitate incentives and support for businesses and institutions (such as schools and hospitals) to buy foods produced locally and sustainably. Since much of this funding comes from the federal level, this effort would require assistance from the state and federal governments. They could also encourage additional opportunities for direct sales of farm products to customers, such as CSAs and farmers markets. School lunch spending per pupil could be increased. These and other "buy local" policies could be promoted through the adoption of a voluntary point-of-origin labeling program, such as the "Illinois Fresh" program, which will educate consumers about local foods and instill a sense of pride in local products.

Recommendation Four: Regional Food Priorities

Recommendation: Have regional organizations identify regional food priorities for state and federal funding, using local plans.

Development pressures are a consistent threat to our region's farmland supply. Coordinated farmland preservation strategies are needed throughout the region.

Regional agencies that already have the infrastructure necessary could coordinate local efforts to educate land use planners and county boards. These include planning agencies in surrounding states contiguous to the CMAP region. Regional agencies can also provide a unified voice to lobby our state and federal legislators and agencies to direct more funding for protecting, enhancing, and expanding our regional capacity to produce, process, and deliver food. These agencies could serve as a conduit to deliver these necessary state and federal funds to local initiatives.

Recommendation Five: Trade and Business Organizations

Recommendation: Encourage regional trade and business organizations to provide programs and services for local food enterprises.

Regional trade and business associations have the knowledge base and communications infrastructure to effectively deliver information and services to their constituents. Farm bureaus, local chambers of commerce, and university extension programs could be tapped to help develop and implement initiatives to grow the region's capacity to produce, process, and deliver food.

Recommendation Six: State Policies

Recommendation: Develop, promote and enact state-wide incentives, funding, and regulations to support farmland preservation, sustainable agriculture, marketing and procuring Illinois-grown food, and a variety of food delivery and food waste systems.

Both regionally and statewide, an extremely small proportion of agricultural land is dedicated to growing fruits and vegetables. As research has indicated, supply follows demand. Statewide strategies to help drive demand and increase fruit and vegetable production include providing funding for large-scale local food purchasing from places like food pantries, senior meals, school lunch programs, and other institutional procurement agencies in order to purchase locally grown produce. The state could also provide end-loaded tax breaks to food industry projects and develop alternative tax categories, similar to those provided for agriculture, for food production.

RECOMMENDATION SEVEN: FEDERAL POLICIES

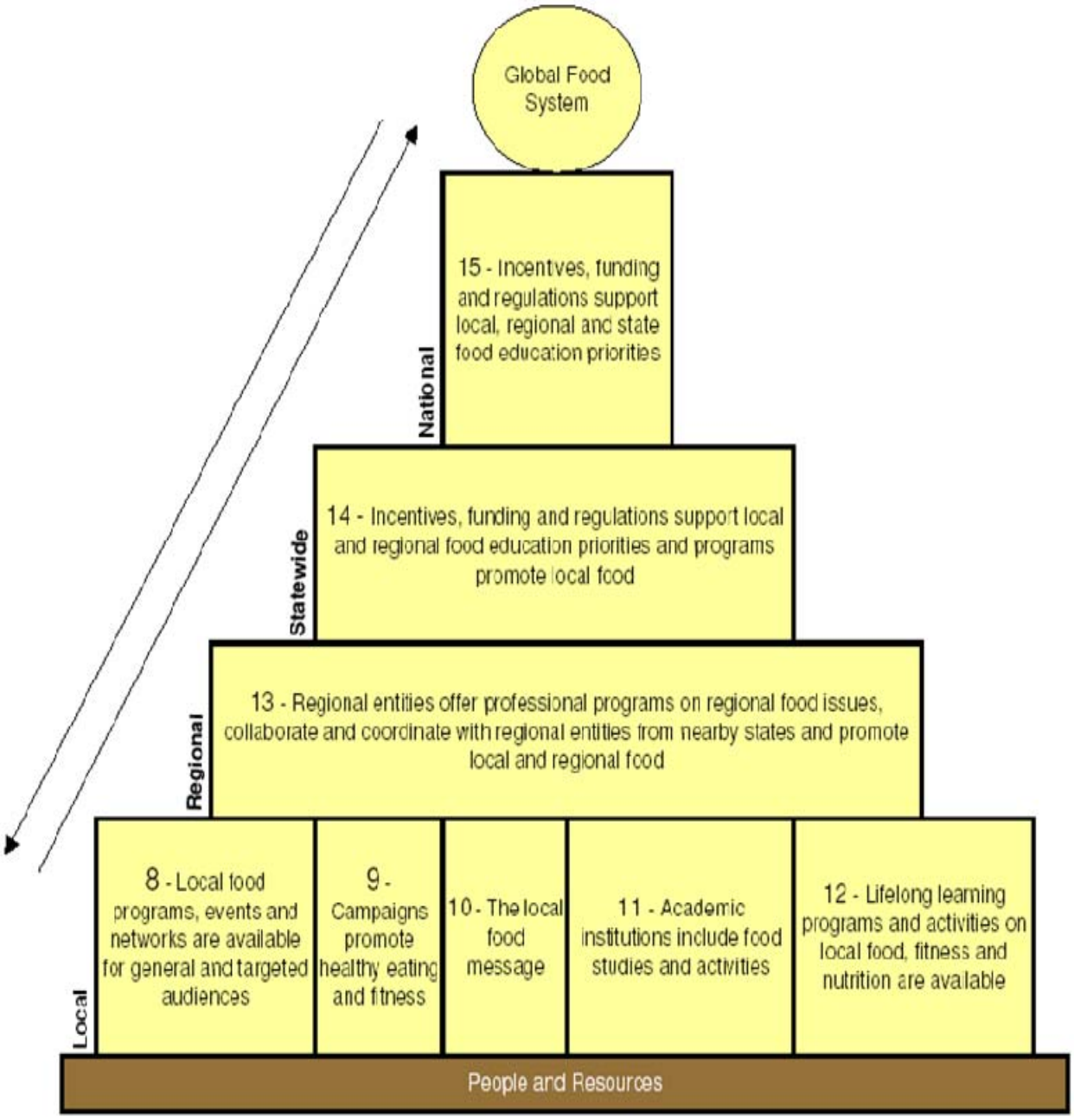
Recommendation: Promote enactment of national policies that provide incentives, funding, and regulations that support farmland preservation, sustainable agriculture, marketing and procuring Illinois-grown food, and a variety of food delivery and food waste systems.

Today the USDA governs a great deal of U.S. agriculture through its operating budget of more than $96.5 billion dollars. Federal funding enables state, regional, and local governments to make and implement policy decisions aimed at growing the local food system. Policy advocacy and reform is consistently needed over time, specifically in the areas of the Child Nutrition Reauthorization Act and the Farm Bill, which cover a great deal of food system issues from assistance programs like SNAP, WIC, funding and nutrition guidelines for school lunches, to commodities, conservation, organic agriculture, livestock, nutrition, research, rural development, tax codes, crop insurance, future markets, and farmers markets.

Examples of how this could be done would be the allocation of additional funding to the National School Lunch program which would ultimately fund the purchase of locally produced fruits and vegetables at the school district level or reforming the Farm Bill to include crop insurance for crops other than commodities.

Finally, one of the best ways to shape federal policy is to prove the need for good programs by making sure that groups in the Chicago region apply for competitive grants and work closely with USDA to refine program objectives.

Food Education Recommendations



Recommendation Eight: Programs, Events and Networks

Recommendation: Make "local food" education programs, events, and networks available for general and targeted audiences.

Using a 'closed loop' model of production, processing, packaging, distribution, and disposal of food and food waste -- where very little to nothing is wasted -- is different from the current norm of the food system. The closed loop model fits the vision of sustainability defined by the advisory group.

In order to achieve this systemic change, what is needed is a focus on education. A robust, multi-tiered network of outreach and educational opportunities is a critical component in helping specialists –policymakers (i.e. planners) and producers (i.e. farmers) – and the general public understand the food system.

At the local level, educational strategies are as follows:

- Have farm organizations, educators, nonprofits and business development groups support programs that recruit, train, and provide technical assistance to both new farmers and those transitioning to sustainable practices.
- Have municipal governments include gardening and urban agriculture in neighborhood development plans and partner with other stakeholders to initiate agricultural workforce development and consumer outreach programs, especially in neighborhoods whose residents have limited economic opportunities and limited access to fresh foods.
- Encourage gardening and urban agriculture education in all sectors, especially in social services where participation could both fulfill community service requirements and provide job training.
- Have advocacy groups identify and mobilize private sector and foundation support for community gardening efforts.
- Build strong networks between producers, retailers, and consumers to create new programs and advocate for policy change.

RECOMMENDATION NINE: DRIVE DEMAND WITH HEALTHY EATING CAMPAIGNS

Recommendation: Promote healthy eating and fitness with local campaigns.

Drive demand for local food. The economic health of a sustainable local food system depends on a strong market for its products. Local governments, business organizations, and advocacy groups can build demand for local, sustainable, seasonal crops through public education campaigns that promote the benefits of healthy eating to all citizens.

- At the local level, target adult consumer patterns with recommendations on healthy cooking and eating in addition to helping consumers become knowledgeable shoppers.

- Have employers promote healthy eating choices in numerous ways:
    - By adopting insurance policies that reward healthy life choices;
    - By implementing workplace health and wellness policies;
    - By offering healthy food options on-site in vending machines and cafeterias;
    - By providing for a work/life balance that ensures adequate time for workers to prepare and eat healthy meals.

RECOMMENDATION TEN: THE LOCAL FOOD MESSAGE FOR POLICY MAKERS

Recommendation: Make the benefits of "local food" evident to local government officials, planners, economists and other policy makers so they can prioritize this system in their respective fields.

Local government officials, planners, economists, and other policy makers are another key educational audience. Make the benefits of local food evident to these decision makers and they, in turn, will prioritize the local food system in their respective fields.

In this recommendation, policy is suggested as a bottom-up strategy, with local advocacy groups and elected officials as the drivers for change:

- Have food policy councils work through public-private partnerships to inform elected officials and citizens about regional issues related to the food system.
- Draft and promote "food charters" and messages to schools, restaurants, the media, and the general public to encourage the consumption of healthy, locally grown food.
- Include food in the programs and planning of economic and community development groups, with a particular focus on food production and urban agriculture as an economic engine and a tool for workforce development.
- Have land use planners educate tax assessors, accountants, estate planners, and others on the financial benefits of setting aside land for agriculture rather than development.

RECOMMENDATION ELEVEN: ACADEMIC INVOLVEMENT

Recommendation: Include food studies and activities at local academic institutions, at the elementary, secondary and post-secondary levels.

Academic institutions have the power to educate the next generation of farmers, cooks, scientists, planners, and consumers, and instill in them a commitment to both sound environmental practices and healthy life choices. The systemic nature of the food system allows it to be adopted into multiple academic disciplines.

Start with the children:

- Integrate food into curriculum standards including appropriate textbooks, nutrition education, culinary skills, and gardening.
- Emphasize food and nutrition at the elementary and secondary levels in the curriculum.
- Promote youth-focused gardening and urban agriculture programs including school "edible garden" programs, and include visits to local farms.
- Teach the benefits of cooking with local foods in home economic courses and extracurricular cooking clubs tailored to the needs of different communities, and promoted through the school cafeteria's menu planning.

At the college and university level, there are numerous possibilities:

- Adopt environmentally sound agricultural technology and organic farming practices in agricultural and land grant schools, including Extension.
- Develop curriculum in city colleges and community colleges on urban and organic agricultural production, culinary training, and other fields related to the food industry;
- Include food history and culture in the humanities curriculum;
- Amplify the food studies component of science coursework through, for example, a unit on maintaining healthy soil chemistry through crop rotation.

RECOMMENDATION TWELVE: LIFELONG LEARNING PROGRAMS

Recommendation: Make available local lifelong learning programs and activities on cooking skills, fitness, and nutrition.

As previously mentioned, food culture influences the way people eat. Lifelong learning programs outside the classroom can help to train people with skills to achieve healthier eating patterns:

- Have public health agencies make free nutritional and cooking programs tailored to the needs of different communities and age groups, from kids to seniors, widely accessible and available;
- Have workforce development agencies incorporate farming into summer youth employment programs;
- Develop skills training programs developed to teach food service workers in cafeterias, hospitals, and restaurants how to source and cook with locally produced foods;
- Offer and promote training in gardening and composting by extension services and other adult learning organizations.

RECOMMENDATION THIRTEEN: REGIONAL EDUCATIONAL PROGRAMS

Recommendation: Ensure that regional entities offer professional programs on regional food issues, collaborate and coordinate with regional entities from nearby states, and promote local and regional food.

Organizations with a regional scope – government agencies, foundations, extension services, and private businesses – could have a significant impact on steering the regional food system toward a local, sustainable model by pooling their resources to provide education and outreach.

- Regional conferences and roundtables should be convened regularly to bring together and expand networks of producers, processors, distributors, and institutions to survey the existing regional food system, identify best practices, and develop a plan to expand production and consumption of local food. The University of Illinois Extension already has such programming in place, but it needs to be adopted at the regional level. The Chicago Food Policy Advisory Council hosts an annual summit, which addresses food issues in the region and draws attendees from the seven-county area.

  Specific conferences are recommended to address issues in the regional context on issues like specialty crops, farmers markets, farmland preservation, and farm-to-school. One specific area to be convened is to bring together regional meat and poultry producers with Chicago restaurateurs to discuss ways the region can meet the restaurant industry's demand for sustainably produced meat.

- Ongoing foundation support could enable regional leaders and entrepreneurs to travel and conduct research projects, such as a producers' guide to local farming and food regulations or a consumers' guide to regional CSAs.
- Foundation support could also be helpful in funding technical assistance and research for programs promoting gardening and other food production efforts at the regional level.

RECOMMENDATION FOURTEEN: STATEWIDE EDUCATION INCENTIVES

Recommendation: Promote and enact statewide incentives, funding, and regulations that support local and regional food education priorities and programs that promote "local food."

Local Food, Farms, and Jobs, a report published in March 2009 by the Illinois Local and Organic Food and Farm Task Force, outlined how the state of Illinois "can facilitate the development of a local food system that complements the existing global farm and food system." The plan's ambitious goal: to direct 10% of Illinois food expenditures to products grown, processed and distributed in state by 2020. The public awareness campaigns and educational initiatives supporting this goal include creation of an Illinois Food, Farms, and Jobs council; a Food, Farms, and Jobs program within the University of Illinois Extension, and a standing Illinois Farmland Committee.

It is recommended that these state-level initiatives work to adapt the regulatory system to be more applicable to sustainable production methods, provide support for farmers transitioning to sustainable practices, and work to raise consumer awareness statewide on the range and diversity of local foods through publications and statewide promotional campaigns.

RECOMMENDATION FIFTEEN: FEDERAL EDUCATION INCENTIVES

Recommendation: Promote federal incentives, funding, and regulations that support local, regional, and state food education priorities.

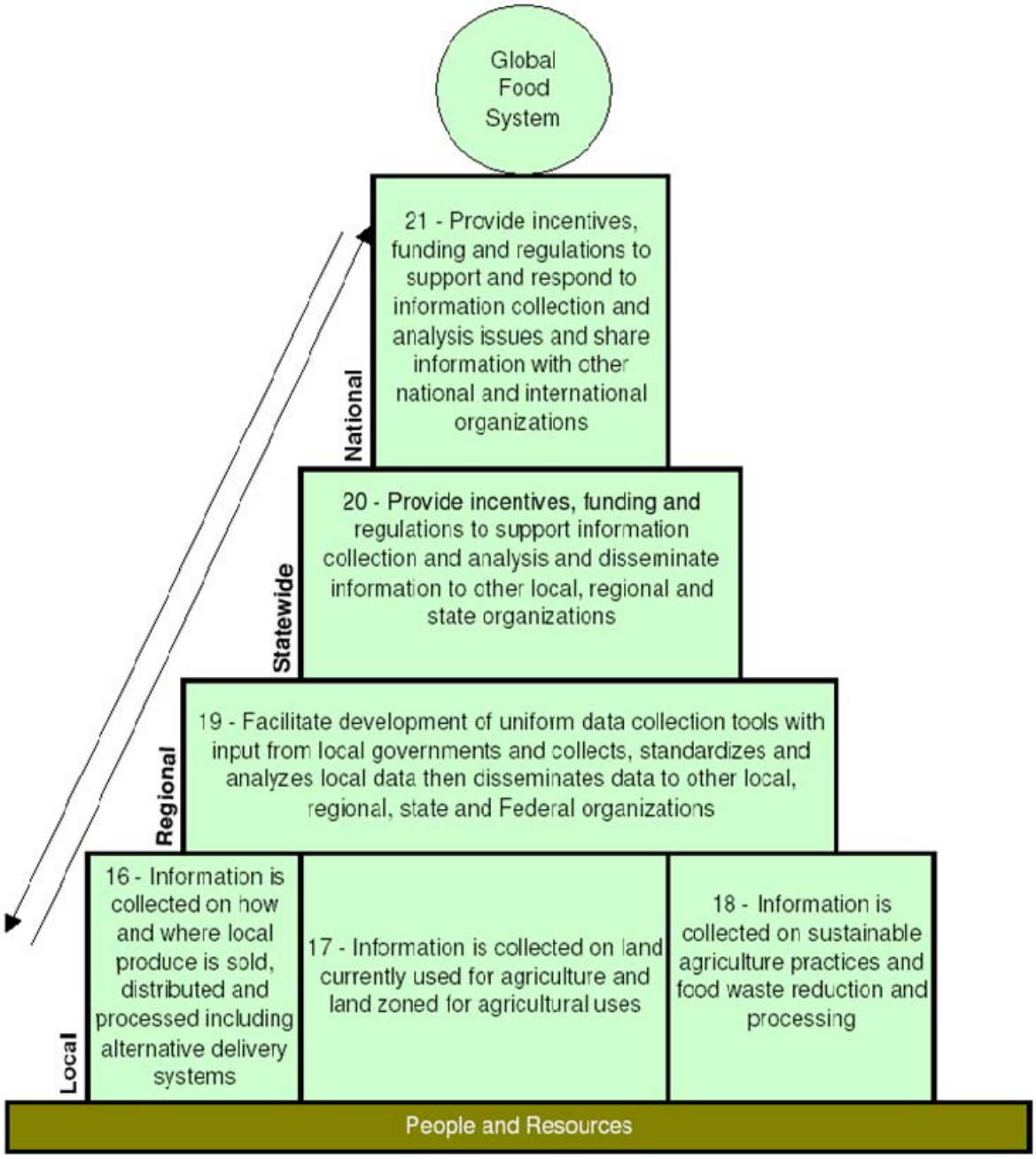
When Michelle Obama joined a crew of elementary school students to break ground for an organic vegetable garden at the White House this year, it sent a clear message nationwide: fresh, healthy, local foods are important for our kids and for the future of our country. But such symbolic gestures – while powerful tools for raising public awareness – are only one part of the picture.

Financial and political support at the federal level would promote a range of specific educational strategies designed to increase public understanding of the benefits of local, sustainably produced foods. They include:

- Increasing funding for nutrition and wellness programs in public schools;
- Expanding the nutrition education components of public health programs such as WIC, SNAP, TANF, and the Federal Child Nutrition Program;
- Mandating point of origin labeling on food products and environmental impact labels on kitchen appliances;
- Using federal grant monies to build allotment gardens for city dwellers without access to arable land;
- Forgiving federal loans to culinary students in exchange for two years service in public school lunch programs.

Through these and other creative educational strategies, the message can become reality.

Food Data & Indicator Recommendations



Recommendation Sixteen: Collection of Local Information

Recommendation: Collect local information on how and where local produce is sold, distributed, and processed including alternative delivery systems.

Reliable data on the regional food system will lay the groundwork for responsible and realistic funding and policy decisions. Data needed on the food system infrastructure includes information on the region's existing capacity to produce, process, and distribute food and the obstacles that might impede the ability to grow that capacity. Local economic development agencies, entrepreneurs, and business groups can collaborate to target solutions accordingly. Maps, marketing statistics, demographics, regulatory information and other analysis needed to plan food production, processing, and distribution should be compiled and shared.

Data on food sourcing – which local institutions source food locally, which ones can, and how much – can direct outreach efforts. Food mapping and other forms of collecting data on food access, especially in communities designated as "food deserts," can lay a foundation for creating incentives for retailers to locate in these underserved communities and developing systems for delivering healthy, affordable food to seniors, children, and other populations at risk. Data on consumers' purchasing patterns over time can undergird education and public awareness campaigns aimed at increasing public understanding of the regional food system.

Potential Indicators

Food Access Programs	Number of farm-to-school programs	National Farm-to-School Program, Center for Food and Justice, Occidental College, Community Food Security Coalition, www.farmtoschool.org
	Number of senior food programs	MealCall.org
	Number of food pantries	Illinois Hunger Coalition- statistics
Direct Marketing by Farmers	Number of farmers who direct market	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Number of Community Supported Agriculture farms	U.S. Dept. of Agriculture, http://www.nal.usda.gov/afsic/pubs/csa/csa.shtml
	Number of farmers markets	U.S. Agricultural Census. http://www.agcensus.usda.gov/index.asp
Regional Food Businesses	Distribution of food and ag-related businesses in region	Market Maker - www.marketmaker.uiuc.edu Moody's Economy - http:\\www.economy.com Harris Infosource- Selectory business directory InfoUSA-New Business List
	Number of employees working in the food-related businesses sector	Moody's Economy – http:\\www.economy.com

Value of Agricultural Sales	By type (i.e.: commodity, specialty, dairy, etc.)	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Total agricultural sales	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Value of agricultural products sold for direct human consumption	US Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Value of organically produced commodities	US Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
Affordability	% change in consumer price index of food relative to % change in wages	Bureau of Labor Statistics, Consumer Price Index Detailed Report Tables, http://www.bls.gov/CPI/#; increase in wages and salaries BLS, Table 2; Employment Cost Index, http://www.bls.gov/news.release/eci.t02.htm
	Number of WIC farmers market program and senior FMNP clients	WIC FMNP, http://www.fns.usda.gov/wic/fmnp/FMNP2007.htm and for Senior FMNP, http://www.fns.usda.gov/wic/SeniorFMNP/SFMNPFY2007Profile.htm
Farmland Production	Land and farms	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Cropland harvested	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Products grown for direct human consumption	US Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Farmland by type (i.e.: pasture, commodity, specialty, etc.)	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Classification of farm sizes by production	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	Net cash farm income	USDA Economic Research Service, http://www.ers.usda.gov/Data/FarmIncome/finfidmu.htm
	Land assessed as agricultural	County tax assessors' offices
	Land zoned as agricultural	Municipal zoning codes/ordinances
Certified Food Production	Number of certified organic farms	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp
	By independent (3rd party) programs	http://www.agriculturaljusticeproject.org/pilot.html; http://www.foodalliance.org/information-for/for-processors-distributors/certified_search
	Total land in certified organic farms/pasture	U.S. Agricultural Census, http://www.agcensus.usda.gov/Publications/2002/Census_by_State/Illinois/index.asp

Recommendation Seventeen: Land Use Data

Recommendation: Collect local information on land currently used for agriculture and land zoned for agricultural zones.

Economic development groups, policy makers, and producers can determine how best to preserve agricultural lands and stimulate farming on lands currently uncultivated if they have accurate, comprehensive data. Local governments, nonprofits, and farm advocacy groups could work together to identify productive agricultural land. Tax assessors could assess interest in landowner participation in conservation easements.

Recommendation Eighteen: Information on Sustainability and Waste

Recommendation: Collect local information on sustainable agricultural practices and food waste reduction and processing.

Specific knowledge of sustainable practices can be shared by both policy makers and producers. Ideas that generated this recommendation include requests for comparative data on sustainable urban farming methods, research into sustainable farming and ranching practices, and data on crop yield and chemical application records from individual farmers. Research into household attitudes and behaviors regarding food waste was also requested, as was data on the total amount of waste produced by various sectors of the food system, and the capacity of local composting facilities to process it.

Potential Indicators

Waste	Number of recycling facilities	Illinois Recycling Association, http://www.illinoisrecycles.org/
	Number of composting facilities	Illinois EPA, Bureau of Land, http://www.epa.state.il.us/land/regulatory-programs/permits-and-management/forms/
	Municipal Solid Waste	U.S. EPA, Region 5, Municipal Solid Waste, http://www.epa.gov/reg5rcra/wptdiv/solidwaste/projects/msw_goals.htm
Sustainable Agriculture	Background, definitions, information access tools	U.S. Dept. of Agriculture, http://afsic.nal.usda.gov/nal_display/index.php?tax_level=1&info_center=2&tax_subject=292

Recommendation Nineteen: Regional Data Standards and Dissemination

Recommendation: Empower regional agencies to develop uniform data collection tools, with input from local governments; to collect, standardize, and analyze local data; and then disseminate data to other local, regional, state, and federal organizations.

Regional agencies could monitor and standardize data collection protocols to support research analyzing the regional food system across a number of sectors. One suggested area of inquiry is a "foodshed analysis" to determine the amount of food produced in the region, the extent to which the region can produce food for its residents, and strategies for purchasing and sustainably managing agricultural land to increase regional production.

Recommendation Twenty: State Information Incentives, Funding and Regulation

Recommendation: Enact statewide incentives, funding, and regulations to support collection, analysis and dissemination of state-level information to other local, regional, and state organizations.

Suggested state-level data collection projects include research into the extent to which those with special dietary needs require supplemental support and research tracking the amount of money spent on food in the state.

Recommendation Twenty-One: National Information Incentives, Funding and Regulation

Recommendation: Promote national incentives, funding, and regulations to support and respond to information collection and analysis issues and to share information with other national and international organizations.

Specific suggestions for federal data collection include research quantifying the environmental impacts of food transportation, USDA data collection on produce grown for local processing and consumption, and research into the social and personal benefits of healthy food choices – and possible strategies for developing promotional campaigns emphasizing these benefits to consumers.

APPENDIX I: GLOSSARY

Agribusiness: A term encompassing all facets of the business of food production, including farming, processing, marketing, and distribution.

Aquaculture: The cultivation of fish, shellfish, mollusks, and aquatic plants under controlled conditions. Though practiced for centuries, aquaculture became commercially popular on a large scale in the 1980s as a means of protecting wild fish stocks from overfishing and is being considered by some for urban situations.

Arable Land: An agricultural term used to describe land that is capable for growing crops, suitable for farming, or able to be plowed or tilled.

Biofuels: A range of fuels derived from plants, primarily ethanol, produced from corn, sugar cane, sugar beet, or sorghum, and biodiesel, produced from oil-rich plants such as soy and palm.

Carbon cycle: The processes – both biologic and anthropogenic — by which carbon (primarily in the form of carbon dioxide) cycles through the atmosphere, terrestrial biosphere, earth, and oceans.

Certified organic: The designation given to a crop produced under a strict set of conditions and certified organic by an accredited agent of the USDA's National Organic Program.

Commodity crops: Standardized crops produced by many farmers and consolidated for processing and eventual use in other products. Common commodity crops include corn, soy, and wheat; end uses include both food (i.e. corn syrup) and non-food (i.e. ethanol) products.

Community food security: The condition by which residents of a given community gain reliable access to a safe, healthy, affordable, culturally appropriate food supply. Food security practices encompass the production and marketing of food, advocacy for political change facilitating food security, development of infrastructure facilitating access to food, and education.

Community Supported Agriculture: A system by which consumers purchase a "share" of a farm's crops in advance of a growing season, then typically collect a box of farm-fresh produce on a weekly or biweekly basis throughout the season. Farmers benefit from having a fixed amount of capital up front; consumers enjoy the direct relationship with a farm, and often may also participate in the cultivation of its crops by working on the farm for a set number of hours. Other farm products distributed along the CSA model include eggs, meat, poultry, dairy, and honey.

Crop rotation: The agricultural practice of routinely changing the crop planted on a given piece of land to maintain the nutrient balance of the soil. For example: Once a nitrogen-depleting crop, such as corn, has been planted on the same acreage for several years, a nitrogen-fixing crop such as soy will be planted to restore proper levels of nitrogen to the soil.

Food miles: The distance a food item travels from harvest to consumption, or "plough to plate." A popular, if rough, measure of the environmental impact of a food item.

Foodshed: Derived from "watershed," "foodshed" denotes the geographic area producing food for a given market. Measures of local foodsheds vary. A strict radius of miles may define some; others may comprise a much larger area defined by transportation networks or cultural affinities.

Food system: A food system comprises all the steps involved in feeding a population, including the growing, harvesting, processing, packaging, transport, marketing, distribution, and disposal of food and food related items.

Local: Food produced within a market's foodshed. Local foods tend to be produced by small, independent producers and entail a relative minimum of transportation and handling. Advocates of "buying local" hold that local foods have a smaller carbon footprint, stimulate local economies, and taste better.

Organic: Used generically, the practice of farming without synthetic chemicals and pesticides —and, in the case of livestock, hormones — according to holistic principles emphasizing biodiversity and sustainability. Nowadays "organic" specifically denotes a crop that has been certified organic (see above).

PMSA: Primary Metropolitan Statistical Area

Sustainability: A system encompassing a broad range of practices that, according to the World Council on Economic Development, "meets the needs of the present without compromising the ability of future generations to meet their own needs." A balanced model of sustainability takes into account the environmental, economic, social, and cultural impacts of a given practice or process. A sustainable food system would be one whose components (production, transportation, etc.) are assessed and regulated according to the needs of these four elements.

Urban agriculture: The practice of gardening and small-scale farming on land in a city or municipality – often empty lots or undeveloped parkland. Usually practiced in accordance with organic farming principles and tailored for sale in market, though community gardens may produce fruits and vegetables solely for consumption by the garden's members. Urban agriculture is increasingly popular as a means of increasing community food security.

APPENDIX II: OVERVIEW OF COMMUNITY FEEDBACK

Public opinion is an important part of this report, as it provides a baseline of information for what issues are of importance and priority to diverse communities. An outreach strategy was developed created in partnership with Chicago Food Policy Advisory Council (CFPAC) members to create an inclusive process for identifying needs, priorities and community assets in the food systems report. CFPAC staff co-hosted four meetings in partnership with its members in the following communities: Chicago Lawn on the southwest side, Englewood on the southwest side, Albany Park on the northwest side, and South Chicago on the southeast side. A total of more than 60 people attended the four meetings. The goals for the meetings were to:

- Share information about CMAP's *GO TO 2040* regional planning process & food systems;
- Engage community-based stakeholders in the planning process by asking for feedback on the vision and to identify priorities for the region;
- Help citizens increase their understanding of their role in the system and resources in their communities.

Community Stakeholders

Though each community has its own set of circumstances, several themes were consistent among them. They were that:

- Education on nutrition, healthy eating, and gardening skills is perceived as highly desirable for both children and adults.
- Urban agriculture — both backyard gardening and larger scale business models — is viewed as a viable way to increase economic development, community development and self-sufficiency.
- Access to high quality food is a major concern among all communities. Regardless of income, people want access to healthier foods at affordable prices.

Farmer Stakeholders

The Cook County Farm Bureau convened a group of more than 20 farmers from throughout the seven county region to discuss issues of importance related to the agricultural community.

Summary of key points:

- Profitability of agriculture in the seven county region often includes tapping commodity crops into the global marketplace and direct marketing produce at farmers markets and other urban outlets. Soil types, land availability, market access,

market prices, input costs, and climate determine what commodities a farmer will produce.

- Challenges in agriculture in the seven county region include development pressures, inheritance taxes, aging of farmers, zoning, nuisance laws, and the incompatibility of farming next to residential districts.
- Regardless of federal Farm Bill subsidies, farmers say they would continue growing corn and soy due to factors such as climate, easy transport, global demand, science and technology improvements, and their non-perishable characteristic.
- In order to drive demand for local produce, education is needed to get urban consumers to value local foods and teach them cooking skills needed to prepare them.

CMAP Committee Stakeholders

During the process, the Food Systems Plan was introduced for commentary at meetings of the CMAP Environment and Natural Resources Committee and the Land Use Committee.

Summary of key points:

- The concept of food as a systemic part of planning was new to most. There was some confusion over the distinction of "local" versus "organic," with the assumption that everything organic is also local and vice versa.
- Zoning issues pertaining to scale and economic value of agricultural land were debated. The environmental impact of regional agriculture and its current effect on land and water were discussed, as was the potential to use sustainable agriculture as an asset to the environment. How food systems might relate to alternative energy sources, water recharge, and biodiversity in 2040 was discussed.
- CMAP committees also discussed expanding alternative strategies for grocery distribution to both educated middle-class consumers as well as low-income inner city consumers and the potential to utilize a delivery service model.

APPENDIX III: SUMMARIES OF OTHER FOOD PLANS

- Portland, Oregon: *Planting Prosperity and Harvesting Health, Trade-offs and Sustainability in the Oregon-Washington Regional Food System*. The Institute of Portland Metropolitan Studies, building off of work done by a group called Community Food Matters, conducted this study. Released in October 2008, the report included steps such as indicator research, peer reviews, stakeholder engagement, and a public forum.

  Institute of Portland Metropolitan Studies. "Planting Prosperity and Harvesting Health, Trade-offs and Sustainability in the Oregon-Washington Regional Food System." October 2008. p. 11. http://www.pdx.edu/sites/www.pdx.edu.ims/files/media_assets/ims_foodsystemsfinalreport.pdf

- Michigan: *Life Cycle-Based Sustainability Indicators for Assessment of the U.S. Food System.* The Center for Sustainable Systems, part of the University of Michigan, held a workshop in 1999 with 60 stakeholders of all parts of the food system. The end result of the workshop was a list of indicators that eventually helped frame this useful report. It was released in 2000 with the hope that the Center could "encourage 'life cycle thinking' in approaches to sustainable agriculture and food consumption."

  Heller, Martin C. and Gregory A. Keoleian. "Life Cycle-Based Sustainability Indicators for Assessment of the U.S. Food System." Center for Sustainable Systems, University of Michigan. Ann Arbor, MI. 2000. p. 5-8. http://css.snre.umich.edu/css_doc/CSS00-04.pdf

- New York City, New York: *Food in the Public Interest: How New York City's Food Policy Holds the Key to Hunger, Health, Jobs and the Environment*. This report emerged from a conference called "The Politics of Food" that took place in November of 2008 in Manhattan. The Manhattan Borough President Scott M. Stringer hosted the conference. The report included findings from a series of seven sessions held over several months. The goal of the report was to contribute to the creation of a sustainable food system plan for New York City.

  Office of Manhattan Borough President Scott M. Stringer. "Food in the Public Interest, How New York City's Food Policy Holds the Key to Hunger, Health, Jobs and the Environment." New York City, New York. February 2009. http://www.mbpo.org/uploads/FoodInThePublicInterest.pdf

- London, England: *Healthy and Sustainable Food for London: The Mayor's Food Strategy.* This report observed that the food system in London "did not function in a way that is consistent with the ambition that London should be a world-class, sustainable city." London Food, an organization that was set up in 2004 to inform the Mayor of food issues and that was funded by the London Development Agency, prepared the strategy report in 2006 with the help of other external individuals and organizations and the Food Implementation Steering Group.

  London Food and the London Development Agency. "Healthy and Sustainable Food for London, The Mayor's Food Strategy." London Development Agency. London, England. May 2006. p.17. http://www.lda.gov.uk/upload/pdf/LDA_Food_strategy.pdf

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